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A

TREATISE

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GONORRHŒA VIRULENTA,

AND

LUES VENEREA.

BY BENJAMIN BELL,

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VOLUME I.

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TO

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FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON,

AND OF THE ROYAL SOCIETY OF EDINBURGH,

Theſe VOLUMES are reſpectfully dedicated, as a ſmall teſtimony of regard, and public acknowledgment, for the advantages which have been derived from his various exertions to promote the extenſion and general utility of Medical Science, by

His obedient,

And very humble Servant,

BENJN. BELL.

EDINBURGH,
1ſt. Nov. 1792.

PREFACE.

AS many of the ſymptoms of Gonorrhœa and Lues Venerea become frequent objects of the ſurgeon's attention, I at one time meant to have introduced a treatiſe on theſe diſeaſes in the Syſtem of Surgery publiſhed ſome years ago, but I was prevented from doing ſo, by different publications upon the ſame ſubject being announced about the ſame period.

As theſe works have ſince made their appearance, and, as ſome of them have been very favourably received, it may be imagined, that farther writings upon this ſubject can ſcarcely at preſent be required. It muſt indeed be admitted that many valuable publications have come forth within theſe few years upon this branch of the profeſſion; particularly one by Mr. John Hunter of London, intituled, A Treatiſe on the Venereal Diſeaſe; and another intituled, Practical Obſervations on Venereal Complaints, by Doctor Swediaur. But although much information may be obtained from both of theſe works, as well as from ſome other late publications upon this ſubject, there is ſtill much left for others to elucidate. Such is the effect of experience and obſervation, that farther advantages are daily accruing from the labours of individuals in the treatment of this as well as of almoſt every other diſeaſe; and as this I hope will in ſome degree appear from the preſent publication,

ſo I ſhall ſtill expect to find that the future endeavours of others will prove yet more ſucceſsful.

Among other points which I have more particularly attempted to elucidate, the treatment of Gonorrhœa by injections, and the quantity of mercury to be exhibited in Lues Venerea, are, perhaps, the moſt important; and I flatter myſelf that I have given views concerning them, which, in practice, will be found to merit attention. The cure of Gonorrhœa by injections is, no doubt, very univerſally practiſed; but while in a great proportion of caſes it proves ſucceſsful, in others it fails entirely: The cauſe of this, ſo far as I know, has never hitherto been explained. Whether I may have conveyed an adequate idea of my opinion upon this point I cannot poſitively ſay; but the obſervations upon which it is founded are ſuch, that all who pay attention to the ſubject may be enabled readily to aſcertain ſuch caſes as will yield to injections, as well as thoſe in which no advantage is to be expected from them.

The opinion which I have ventured to ſupport, of the difference between the matter of Gonorrhœa, and that of Lues Venerea, will no doubt be cenſured by many. They ought, however, to recollect, in matters of opinion, which cannot be proved by demonſtration, that ſome uncertainty muſt always take place; and before cenſuring with ſeverity the opinions which others may ſuggeſt, they ſhould conſider whether their own may not be equally liable to objection. To me it appears that the reaſons which I have adduced in ſupport of my opinion are very concluſive, but I ſhall make full acknowledgment of my error, if ſufficient reaſons ſhall ever be given to ſhow that it is ill-founded. In the mean time, it will be perceived, that the theory which I have adopted does not lead to any deviation from the practice which now generally prevails upon this point, while it ſerves to explain more clearly than the opinion which has commonly prevailed, ſeveral of the phenomena of the two diſeaſes, as well as the cauſe of different remedies being neceſſary for each of them.

I do not expect that practitioners of experience and obſervation will derive much information from this publication, but I am hopeful that beginners will derive ſome advantage from it; for it has been equally my deſire to exhibit a correct view of the different ſymptoms of which I treat, and to point out the method of cure in a manner that will be clear and intelligible. Where theory is ever admitted, it is chiefly with a view to explain, upon rational principles, ſuch points as the ingenuity of ſome ſpeculative writers have tended to render intricate.

CONTENTS.

VOLUME I.

CHAP. I.

Conſideration of the Queſtion, Whether Gonorrhœa and Lues Venerea originate from the ſame Contagion, - - - Page—17

CHAP. II.

Of Gonorrhœa Virulenta.

SECT. I.

General Obſervations on the Symptoms, Cauſes, and Seat of Gonorrhœa Virulenta, - 37

SECT. II.

Of the Prognoſis in Gonorrhœa Virulenta, - 47

SECT. III.

General Obſervations on the Cure of Gonorrhœa, 50

SECT. IV.

Of the Firſt Stage of Gonorrhœa, - 55

SECT. V.

Of the Second Stage of Gonorrhœa, - 67

SECT. VI.

Of the Third Stage of Gonorrhœa, - 74

SECT. VII.

Of the Fourth Stage of Gonorrhœa, - 82

SECT. VIII.

Of Chordee, - - - 87

SECT. IX.

Of Hæmorrhages from the Urethra, - 90

SECT. X.

Of Gonorrhœa in Women, - - 91

SECT. XI.

Recapitulation, - - 96

CHAP. III.

Of the Conſequences of Gonorrhœa Virulenta.

SECT. I.

General Remarks on the Conſequences of Gonorrhœa, 99

SECT. II.

Of Gleets, - - - 100

SECT. III.

Of Impotency from Seminal Weakneſs, - 121

SECT. IV.

Of Obſtructions in the Urethra from Gonorrhœa Virulenta, - - - 129

§ 1. Of Tumours in the Urethra and contiguous Parts, - - - 130
§ 2. Of Spaſmodic Obſtructions in the Urethra, 132
§ 3. Of Caruncles in the Urethra, - 139
§ 4. Of Obſtructions in the Urethra from Strictures, properly ſo called; of Bougies, and Fiſtulæ in Perineo, - - - 141

SECT. V.

Of Deranged Senſations in the Bladder, Urethra, and contiguous Parts, - - 164

SECT. VI.

Of Swellings of the Teſticles, - 175

SECT. VII.

Of Swellings of the Spermatic Cord, - 187

SECT. VIII.

Of Swellings of the Lymphatic Veſſels of the Penis, 189

SECT. IX.

Of Swellings of the Glands of the Groin, - 193

SECT. X.

Of Excoriations of the Glans and Prepuce, - 194

SECT. XI.

Of Excoriations in the Parts of Generation in Women, - - - 201

SECT. XII.

Of Phymosis and Paraphymosis, - 202

SECT. XIII.

Of Warts on the Glans and Prepuce, and Labia Pudendi, - - - - 209

SECT. XIV.

Of Gonorrhœa Simplex, - - 214

CONTENTS.

VOLUME II.

CHAP. IV.

On Lues Venerea.

SECT. I.

General Obſervations on Lues Venerea, Page—3

SECT. II.

Of the Symptoms of Lues Venerea, - 8

§ 1. General Obſervations, - ibid.
§ 2. Of Chancres, - - ibid.
§ 3. Of Buboes, - - 14
§ 4. Of the Venereal Sore Throat, - 30
§ 5. Of Venereal Sores in the Noſe and Mouth, 34
§ 6. Of Venereal Blotches, - - 41
§ 7. Of Venereal Ulcers, - - 45
§ 8. Of Nodes, and other Swellings of the Periosteum, Bones, and Tendons, - - 52
§ 9. Of Venereal Excreſcences about the Anus, 59
§ 10. Of the Venereal Swelling of the Teſtes, 61
§ 11. Of Alopecia, - - - 64
§ 12. Of Blindneſs, as a Symptom of Lues Venerea, 65
§ 13. Of Deafneſs, - - 68
§ 14. Of Anomalous Symptoms, - - 69

SECT. III.

Of the Venereal Virus, - - - 74

SECT. IV.

Of the Remedies uſed in Lues Venerea, - 81
§ 1. General Obſervations, - ibid.
§ 2. Of Mercury, - - 86
1. General Obſervations upon Mercury, ibid.
2. Of the Effects of Mercury upon the Human Body, - - - 87
3. Of the Operation of Mercury in the Cure of Lues Venerea, - - - 89
4. Of the Preparations of Mercury, - 100
5. Of the different Methods of exhibiting Mercury, 105
6. Of the Duration of a Mercurial Courſe, and the Quantity of Mercury to be exhibited, - 118
7. Of the Regimen to be obſerved during a Courſe of Mercury, - - 124
8. Of Profuſe Salivation and ſome other Effects of Mercury, - - - 126
9. Does Mercury ever fail in the Cure of Lues Venerea? - - 134
§ 3. Of Guiacum, - - 138
§ 4. Of Sarſaparilla, - - 140
§ 5. Of Mezereon, - - 141
§ 6. Of Opium, - - 143

SECT. V.

Of the Cure of Lues Venerea, - 146
§ 1. Of the Cure of Chancres, - ibid.
§ 2. Of the Cure of Buboes, - - 158
§ 3. Of the Cure of Venereal Ulcers, - 170
§ 4. Of the Cure of Venereal Blotches, - 177
§ 5. Of the Cure of Nodes, Swellings of the Periosteum, &c. - - 178
§ 6. Of the Cure of Venereal Excreſcences about the Anus, - - 181
§ 7. Of the Cure of the Venereal Swelled Teſticle, ibid.

§ 8. Of the Treatment of Alopecia, Venereal Blindneſs, and Deafneſs, - - 184
§ 9. Of the Cure of ſome Anomalous Symptoms of Lues Venerea, - - 187

SECT. VI.

Of Lues Venerea in Infants, - - 190

SECT. VII.

Of ſome Peculiarities of Form under which Lues Venerea has appeared in Scotland and Canada, - 199

SECT. VIII.

Of Prophylactics, - - 206

SECT. IX.

Of Lues Venerea as inducing other Diſeaſes, 208
Appendix, - - 235

A

TREATISE

ON

GONORRHŒA VIRULENTA,

AND

LUES VENEREA.

CHAPTER I.

Conſideration of the Queſtion, Whether Gonorrhœa and Lues Venerea originate from the ſame Contagion.

AN opinion has been generally received amongſt practitioners, that Gonorrhœa Virulenta and Lues Venerea are of the ſame nature; that they originate from the ſame contagion; and are only diſtinguiſhed by the circumſtance of Gonorrhœa being a local diſeaſe of the urethra, while the other is a general affection of the ſyſtem. But, as there is cauſe to imagine that theſe diſeaſes ariſe from different ſpecific contagions, and as the eſtabliſhing of one or other of theſe opinions muſt influence the conduct of the cure, it becomes a matter of importance to inſtitute an enquiry into this part of our ſubject.

Both diſeaſes are contracted in a ſimilar way; both, in the firſt inſtance, affect the genital organs; and they occaſionally appear at the ſame time in the ſame patient: hence it has been concluded that they have a common origin, and one method of cure has been ſuppoſed applicable to either.

The refuſal of ſome patients to ſubmit to the diſtreſs and inconveniency, the frequent reſult of a protracted mercurial courſe, and who nevertheleſs reco-

vered from the uſual ſymptoms of Gonorrhœa, firſt ſuggeſted a doubt of the two diſeaſes being produced by the ſame contagion. It is well known that Lues Venerea can be certainly cured by mercury, only; and the opinion reſpecting the exiſtence of a ſpecific contagion of Gonorrhœa, ariſing from this obvious and marked difference in the method of cure, appears to be fixed and eſtabliſhed by the following facts: The ſymptoms and conſequences of Gonorrhœa are perfectly different from thoſe which take place in Lues Venerea. Both diſeaſes have appeared, at different periods, in the ſame countries; and, in ſome inſtances, they have remained diſtinct and uncombined for a great length of time.

That the ſymptoms of the two diſeaſes are different, is univerſally known. A particular detail of ſuch as are peculiar to each, will be given in the enſuing chapters. At preſent, it is only neceſſary to obſerve, that Gonorrhœa conſiſts of a diſcharge of puriform matter from the urethra; which, even by thoſe who ſupport the contrary opinion, is now admitted to be in almoſt every inſtance, a local affection, and that it very rarely contaminates the general habit of body: while Lues Venerea is a diſeaſe of the conſtitution, ariſing from the abſorption of venereal virus from any part of the ſurface of the body, but moſt frequently from the genitals; by which are produced buboes, ulcers in various parts, particularly in the noſe and throat, pains and ſwellings in the bones, with a variety of other ſymptoms which it is not at preſent neceſſary to mention.

The firſt appearance of the Lues Venerea is, for the moſt part, in the form of a chancre or ſmall ulcer, in ſome part of the penis. It is univerſally admitted, that even the ſlighteſt affection of this nature is apt to produce the pox, or a general affection of the ſyſtem; inſomuch, that no practitioner of experience will truſt the cure of this ſymptom to local remedies. If the ſore be left to itſelf, it almoſt always becomes worſe. The matter which it affords is taken up by the abſorbents; and buboes, with the other ſymptoms enume-

rated above, very certainly enſue. Theſe are almoſt the univerſal conſequences of a ſore produced by the venereal virus; but they alſo occur frequently where the ſkin remains ſound and entire; that is, abſorption of the venereal poiſon often takes place where no veſtige of ulceration is preceptible. This, indeed, is denied by many; but I have met with various inſtances of it, and it will be admitted by every practitioner of experience. Now, this being eſtabliſhed, in the application of the venereal virus to every other part of the body, if the matter of Gonorrhœa were of the ſame nature, why does it not, in almoſt every inſtance, enter the ſyſtem, and produce pox? So far as we know, the urethra is as plentifully ſupplied with abſorbents as other parts of the body; the ſame kind of matter, when applied to them here, ought therefore to be productive of ſimilar effects: and hence Lues Venerea ought frequently, perhaps in every inſtance, to be the conſequence of Gonorrhœa, were the matter by which the two diſeaſes are produced the ſame.

As this is a ſtrong argument in favour of the two diſeaſes proceeding from different kinds of contagion, much ingenuity has been exerted by thoſe who ſupport the contrary opinion, in endeavouring to account for it.

In the firſt place, it has been ſaid, that Gonorrhœa ſometimes terminates in pox, and, therefore, that this of itſelf is a ſufficient proof of the two affections being of the ſame nature.

Were it certain that this ever happened, no farther evidence would be required, as a few well-marked inſtances would be concluſive; but every unprejudiced practitioner will admit, that no ſufficient proofs of it have ever occured.

In order to ſupport this opinion, data muſt be received, which we know to be inadmiſſible. We muſt admit, that a perſon with chanchres only, communicates to another, not only every ſymptom of pox, but of Gonorrhœa, and that another with Gonorrhœa only gives to all with whom he may have connection, chancres with their various conſequences. This ought, indeed, to be a very common occurrence; inſomuch,

that every practitioner ſhould be able to decide upon it with certainty, if this opinion was well founded: Inſtead of which, it will be admitted by all, that the one diſeaſe being produced by the other is even, in appearance, a very rare occurrence, I have paid much attention to the point in queſtion; and, in almoſt every inſtance, a few caſes indeed only excepted, and where the moſt particular enquiries even were made, it has happened, that a perſon infected with Gonorrhœa has received it from another evidently labouring under that diſeaſe, and that chancres have been communicated by ſuch as were diſtreſſed with chancres only.

This, I am convinced, will be very commonly found to be clearly the caſe; ſo that a few inſtances, bearing ſome appearances of the contrary, are much more readily explained on the idea of the two diſeaſes being produced by different kinds of contagion; and this may alſo be ſaid of the few ſolitary caſes that may be met with, of chancre being ſuppoſed to terminate in Gonorrhœa, and Gonorrhœa in chancre, and other ſymptoms of pox. We can more eaſily conceive that the ſame perſon ſhould, in ſome inſtances, receive, and therefore be able to communicate, both kinds of contagion, than that the incident we are conſidering ſhould be ſo ſeldom met with, were the opinion well founded, of the two diſeaſes being originally of the ſame nature.

However ill founded an eſtabliſhed opinion may be, if it has received the ſanction of being generally adopted, we know how difficult it is to overturn it. There are few who enter ſo minutely into the conſideration of ſuch points as to be able to decide upon them; and of thoſe who do, there are very few who will take the trouble of engaging in ſuch diſcuſſions as are neceſſary for the conviction of others. This may be conſidered as the chief cauſe of the point in queſtion remaining ſo long in obſcurity, as well as of the explanation hitherto uſually given, of various circumſtances in Gonorrhœa and Lues Venerea having been uniformly made to ſupport it. It will alſo ſerve to

account for circumſtances being held forth as matter of fact, which, on inquiry, are perceived to be ill founded; for, when once an opinion is admitted, we are apt to give ſuch an explanation of whatever may ſeem to relate to it, as can in any way tend to ſupport it.

Thus, although few in the preſent age will aſſert that Gonorrhœa often terminates in Lues Venerea, yet by many we are told, that it is very apt to do ſo when it is improperly treated. Whatever puts a ſudden ſtop to a ſevere or copious diſcharge from the urethra is by many ſuppoſed to do harm. Hence all who condemn the uſe of injections in Gonorrhœa affirm, that they often convert a ſimple clap into a pox, by throwing into the blood what otherwiſe would have been carried off. This, however, is by no means ſupported by experience. A ſtimulating injection will no doubt excite pain and inflammation in the urethra; and this, in ſome inſtances, will be productive of ſwelled teſtes, and perhaps of ſympathetic ſwellings in the glands of the groin; but I have not known a ſingle inſtance of pox induced in this manner: and as I have long been in the daily uſe of injections, many caſes of it muſt have occurred, if the idea I have juſt ſtated were well founded. Till of late, indeed, a patient who was ſo unfortunate as to have a clap ſuddenly ſtopped, was ſo certainly conſidered as poxed, that he was immediately put under a very complete courſe of mercury, by which he was made to undergo a very unneceſſary and diſtreſsful confinement.

Although this practice, however, is now very commonly exploded, yet there are ſome who ſtill adhere to it. I was called, in April 1784, to viſit a gentleman who, in a Gonorrhœa attended with a good deal of inflammation, had been ſo fooliſh as to live freely, and to ride much on horſeback. This, with the unguarded uſe of a very ſtimulating injection, put a ſudden ſtop to the diſcharge; and at the ſame time it excited a very conſiderable degree of pain and inflammation along all the poſterior part of the urethra, towards the

proſtrate gland and neck of the bladder, attended with a painful and frequent deſire to make water.

On the idea of theſe being ſymptoms of pox, he was immediately put under a courſe of mercury; and, when I firſt ſaw him, he had been uſing it for the ſpace of ſix weeks. The ſurgeon in attendance acknowledged that no advantage had been derived from it; and the patient himſelf ſaid that his diſtreſs was daily increaſing. They were both, therefore, eaſily perſuaded to lay the mercury aſide; and, by the repeated application of leeches to the perineum, of fomentations, and opiates, to allay the pain, the inflammation ſoon began to ſubſide; and, in a ſhort time, he was perfectly well.

In December 1788, a young man called upon me, with a painful hard ſwelling in his groin, of an oblong form, nearly an inch in diameter, and reaching from the ring in the external oblique muſcle down to the top of the teſtis. It appeared ſuddenly, about four months before, and ſeemed to be the conſequence of a clap being too haſtily ſtopped. He was at firſt attacked with ſevere pain at the neck of the bladder, which ſtretched to the groin, and down to the teſtis of the ſame ſide. This, together with a conſtant and painful inclination to void urine, rendered his life miſerable. Nor was his diſtreſs in any degree abated by a courſe of mercury which he was immediately put under. On the contrary, the ſwelling, which at firſt was not thicker than a common quill, was now very conſiderable. My idea of the ſwelling was, that at firſt it had been merely an inflammatory affection of the vas deferens, which by degrees had ſpread to the reſt of the ſpermatic chord; but, what was unuſual, it had never affected either the teſtis or epididemis. As a conſiderable quantity of mercury had been taken, and as, inſtead of proving uſeful, it had rather appeared to do harm, the ſurgeon whom he employed was eaſily perſuaded to truſt the cure to other remedies. Local bloodletting with leeches was frequently repeated, both in the perineum and groin. The parts were regularly fomented with a ſolution of ſaccharum

ſaturni. His bowels were kept eaſy with gentle laxatives, and he was put upon a mild diet of milk and vegetables. In a few days the pain abated, and the tumour gradually leſſened, till at laſt, in the courſe of five or ſix weeks, it was entirely gone.

In the courſe of laſt winter, I attended two different patients, with alarming ſymptoms about the neck of the bladder, evidently induced by the improper management of Gonorrhœa. The parts in both were not merely pained, but conſiderably ſwelled; and, at the ſame time, almoſt a total ſuppreſſion of urine took place. Although in both the diſcharge from the urethra had been ſuddenly ſtopped, I did not adviſe mercury. The patients being both plethoric, were plentifully blooded, firſt at the arm, and afterwards repeatedly with leeches in the perineum. This, with fomentations, and opiates to allay the violence of the pain, aſſiſted by a cooling regimen and gentle laxatives, very ſoon completed the cures.

Theſe inſtances are given out of a great number that might be adduced, merely to ſhew, that the ſymptoms which ſupervene on the ſudden ſtoppage of a clap, are local, and not connected with any affection of the conſtitution, which they neceſſarily would be, if they were of the ſame nature with Lues Venerea.

It will perhaps be ſaid, that although this may have happened in a few caſes, yet that in others there has been cauſe to ſuſpect, that Lues Venerea has been the conſequence of a clap diſappearing in this manner. In anſwer to this, it is ſufficient for me to ſhew, that this is at leaſt a rare occurrence, as I think I am intitled to do, from my never having met with an inſtance of it. It has been ſuppoſed, that the ſudden check given to the diſcharge in caſes of clap, muſt neceſſarily throw the matter into the blood, and that pox muſt accordingly enſue from it. Were the matter of the two diſeaſes the ſame, this would happen in every inſtance; ſo that, when we can ſhow that it ſeldom happens even in appearance, we are entitled, from this argument alone, to conclude, that they are produced by two different kinds of contagion; and, where pox

has appeared at the ſudden termination of Gonorrhœa, that the two kinds of infection had either been communicated together; or, what may more frequently perhaps be the caſe, the patient will be found to have received the pocky contagion by communication with a diſeaſed woman at the very time he laboured under Gonorrhœa. I have already remarked, that Lues Venera is frequently produced by abſorption while the ſkin remains entire, and where no chancre or excoriation is perceptible. There is therefore much cauſe to imagine, that in long continued caſes of Gonorrhœa, many may be infected with Lues Venerea by communication with others labouring under it; and as this may happen without any external mark of it taking place, it is not ſurpriſing that ſome fallacy ſhould ariſe from this circumſtance.

The abettors of the opinion, that the matter of the two diſeaſes are the ſame, admit that Gonorrhœa very ſeldom terminates in pox*. And they attempt to account for this, that is, for the two diſeaſes not being produced more frequently by the application of the ſame matter, by ſaying, that this depends upon the difference of parts to which the matter is applied.

They divide the different ſurfaces of the body chiefly into two kinds, what they term *ſecreting ſurfaces* and *non-ſecreting ſurfaces*. By the firſt they mean all the paſſages for extraneous matter, including alſo the ducts of glands, ſuch as the mouth, noſe, eyes, arms,

* This is even granted by one who keenly ſupports the oppoſite doctrine in every other point. In ſpeaking of Gonorrhœa and Chancre not terminating ſo frequently as might be expected in the production of each other, he ſays, "Although "it does not often happen, yet it ſometimes does, *at leaſt there is great reaſon to "believe ſo.* I have ſeen caſes where a Gonorrhœa came on, and in a few days "after in ſome, in others as many weeks, a chancre has appeared; and I have "alſo ſeen caſes where a chancre has come firſt, and in the courſe of its cure a "running and pain in making water have ſucceeded." V. Treatiſe on the Venereal Diſeaſe, by John Hunter, page 16.

This is what every practitioner has ſeen; but by admitting ſo clearly that it is a very rare occurrence, Mr. Hunter tends rather to ſtrengthen the contrary opinion: for, were the two diſeaſes produced by the ſame kind of matter, the one would clearly and neceſſarily *often* terminate in the other. In the few caſes which Mr. Hunter, in the courſe of extenſive practice, has met with, there is more cauſe to imagine, either that the two diſeaſes were communicated at once, or that the one was given while the patient laboured under the other, than that nature ſhould deviate ſo much from her ordinary courſe as to produce them in a few inſtances ſo very differently from what obviouſly happens in the courſe of general obſervation.

and urethra; and by *non-ſecreting* ſurfaces, the external ſkin in general. To which they add a third kind of ſurface, leading from the one to the other, as the glans penis, prolabium of the mouth, the inſide of the lips, and the female pudendum: which ſurfaces, partaking of the properties of each of the others, but in a leſs degree, are capable of being affected in both ways, ſometimes by being excited to ſecretion, and at other times to ulceration*.

Upon this, their theory, or opinion of the point in queſtion, is attempted to be eſtabliſhed: When the contagion, either of Gonorrhœa or pox, and which they conſider to be the ſame, is applied to any part of the external ſkin, particularly to the glans penis, where the ſkin is very thin, chancre or ulceration, they obſerve, will moſt readily enſue, as theſe are *not ſecreting ſurfaces;* while the ſame kind of matter applied to the urethra muſt neceſſarily excite Gonorrhœa, from this being a ſecreting ſurface, and therefore not ſo eaſily affected with ulceration as with irritation; by which an increaſed diſcharge, attended with ſome change in the mucus of the part, muſt accordingly be produced.

This idea, however, is more ingenious than ſolid. It might anſwer the purpoſe of giving a ſpecious appearance to an ill-founded opinion, but it will not ſtand the teſt of inquiry.

In the firſt place, on the ſuppoſition of the matter of Gonorrhœa and Lues Venerea being the ſame, the latter ought to be a much more frequent occurrence than the former, from the greater eaſe with which the matter of infection muſt, in every inſtance, be applied to thoſe parts on which it can produce chancres than to the urethra, where, inſtead of chancre or ulceration, it almoſt always excites Gonorrhœa. It is difficult to conceive how the matter by which the diſeaſe is communicated ſhould find acceſs to the urethra; while, on the contrary, all the external

* Vide John Hunter on the Venereal Diſeaſe.

parts of the penis, particularly the glans, muſt be eaſily and univerſally expoſed to it: and yet Gonorrhœa is a much more frequent diſeaſe than pox. Caſes of Gonorrhœa are in proportion to thoſe of Chancre and Pox, ſo far as my obſervation goes, of about three to one; while it is obvious, that the very reverſe ſhould happen, if the two diſeaſes were produced by the ſame kind of matter*.

Again, were this the caſe, ſhould we not find Gonorrhœa, in almoſt every inſtance, terminating in Pox, and Chancre in Gonorrhœa; for every one knows, that in Gonorrhœa the matter is at all times paſſing from the urethra over the glans and prepuce, and in Chancre, that it is paſſing from the glans into the entrance of the urethra. It happens indeed, in a few inſtances, (Mr. Hunter, we ſee, has met with ſome caſes of it) that the one diſeaſe ſupervenes upon the other: but we have alſo ſeen that theſe are rare occurrences; and, where they have not been communicated by ſubſequent connection with an infected perſon, that the two diſeaſes have probably been given at one and the ſame time. It is no argument againſt this ſuggeſtion, to ſay, that inſtances have been met with of a Gonorrhœa appearing during the continuance of chancres of ſeveral weeks duration, and *vice verſa;* for every practitioner muſt have met with inſtances of theſe diſeaſes both appearing at the diſtance of two or three months from any expoſure to infection.

I have at this moment a gentleman under cure for a deep, foul chancre, altogether within the urethra. It was of ſeveral weeks duration before I ſaw it, and yet no Gonorrhœa took place. He is now getting well by a complete courſe of mercury, and repeated application of cauſtic.

I have met with various caſes of this, as every practitioner muſt have done; and, ſo lately as the month

* Mr. Hunter ſuppoſes, that the proportion the caſes of Gonorrhœa bear to thoſe of Chancre, is as four or five to one. Vide Treatiſe on the Venereal Diſeaſe, p. 217. This is ſurely a weighty argument againſt the opinion he endeavours to ſupport, of Gonorrhœa and Chancre proceeding from the ſame contagion.

of April laſt, I was called to a gentleman with a painful chancre on each ſide of the urethra. The ſore extended about the eighth part of an inch up the paſſage; and the parts being much inflamed, I heſitated to apply cauſtic. This rendered the cure tedious, but ſtill no Gonorrhœa took place. At laſt, after having taken a conſiderable quantity of mercury, and when the chancres were looking clean, and in a healing ſtate, he was ſeized with all the ſymptoms of a ſevere clap, with heat in making water, chordee, and a plentiful diſcharge of a thin green matter. This, however, bore all the appearance of a recent infection. I at once ſaid ſo to my patient; and he candidly acknowledged that he had imprudently expoſed himſelf, by having connection with a girl of the town, three or four days previous to the acceſſion of theſe ſymptoms.

We may alſo remark, that the diſcharge from Gonorrhœa frequently becomes ſo acrid as to excoriate the glans and preputium, and even to excite a very plentiful formation of matter; but every one knows that this is materially different from chancre. It is altogether different in appearance, and ſo materially different in its effects, that ſcarcely any practitioner of experience will truſt the cure of chancre to any thing but mercury, while, in the other, mercury, I imagine, is very ſeldom employed. However extenſive the excoriations may be, they are eaſily removed by local remedies; and I have never known an inſtance of pox ſucceeding to this kind of treatment. Nay, I have met with various inſtances of ſuch affections, where mercury had been given in conſiderable quantities with no advantage whatever, and where a cure was effected by the uſe of an aſtringent waſh.

About eighteen months ago, a gentleman came to town from a conſiderable diſtance, with an extenſive excoriation over all the glans and preputium, attended with a diſcharge of a large quantity of thin, offenſive matter. The quantity of matter indeed was ſo conſiderable, that at firſt ſight it appeared to be the diſcharge from a very inveterate recent caſe of Gonorrhœa; but, on farther examination, it was found to

proceed entirely from the glans and prepuce, the clap by which it was produced being entirely gone.

He had taken mercury for the ſpace of ſix weeks; and the parts had been regularly bathed in milk and water, but with no advantage. The diſcharge continued as plentiful as ever, and the preputium was beginning to acquire ſome degree of thickneſs, and to be difficult to retract. In the ſpace of a week he was completely cured, merely by bathing the parts from time to time with brandy and water, and applying, during the night, a poultice ſtrongly impregnated with ſaccharum ſaturni.

This, as well as a variety of ſimilar affections, which, were it neceſſary, I might enumerate, clearly evince, not only that the matter of Gonorrhœa, when confined to the urethra, does not terminate in pox, but that it proves equally inoffenſive to the conſtitution, where it is even ſo ſharp and acrid as to excoriate the ſurrounding parts. This points out a very marked difference between the matter of the two diſeaſes. In pox, even the ſlighteſt ſore never fails to throw matter into the ſyſtem, while the moſt extenſive affections proceeding from Gonorrhœa are ſo ſeldom found to injure the conſtitution, that I have never met with an inſtance of it.

By thoſe who wiſh to ſupport the oppoſite doctrine, it is ſaid, that the matter of Gonorrhœa would more frequently terminate in pox, were it not for the mucus of the urethra with which it is blended, and by which they ſuppoſe it to be rendered not only milder in its nature, but not ſo apt to be taken up by the abſorbents. This, however, is merely ideal; and no proof can be advanced in ſupport of it. Beſides, the force of the argument is entirely done away, when we ſee, from what has been obſerved above, that even where the matter of Gonorrhœa is more acrimonious than almoſt ever occurs in caſes of Chancre, ſo as in ſome inſtances to produce very extenſive excoriations, that ſtill no affection of the conſtitution enſues from it.

Nay, we ſee, even in ſuch diſeaſes as are found to proceed from what is termed a tranſlation of the matter

of Gonorrhœa to other parts of the body, and which we ſuppoſe to happen through the medium of the circulation, that ſtill no affection of the conſtitution proceeds from them. This is particularly the caſe in ſuch inſtances of ophthalmia as ſometimes proceed from Gonorrhœa, and in which a conſiderable diſcharge takes place, of a puriform matter from the eye-lids, very ſimilar to the matter of a recent clap. I have alſo met with inſtances, of patients labouring under Gonorrhœa being ſeized with a ſimilar diſcharge from the membrane of the noſe; but in none of theſe have I ever known Lues Venerea enſue. A conſiderable number of examples might be adduced of each of theſe; but the three following will be ſufficient.

In the year 1786, a young man applied to me, with a very troubleſome painful diſeaſe in both eyes. The eye-balls were not much inflamed outwardly; but as he experienced an intenſe degree of pain from the admiſſion of light, I concluded that the retina, or other deep-ſeated parts of the eye, were in a ſtate of inflammation; and the membrane of the eye-lids was not only inflamed, but a conſtant and copious diſcharge took place from them, of a greeniſh yellow matter, bearing much the appearance of the matter of a recent clap.

The account I received of his diſeaſe was this: That he had for eight or ten days laboured under Gonorrhœa, the ſymptoms of which, however, were not more ſevere than uſual; when, after being heated with drinking port wine, the diſcharge from the urethra, which had previouſly been copious, diſappeared almoſt entirely. His eyes, almoſt immediately thereafter, became painful; and, in leſs than twenty-four hours, the diſcharge of matter had taken plaec from the eye-lids.

The diſeaſe was at firſt treated with bliſters, ſlight evacuations of blood, and the uſual applications of ointments and collyria. Theſe not proving ſucceſsful, a courſe of mercury was preſcribed: but, although different attempts were made with it, miſchief alway's enſued from it. It did not leſſen the diſcharge, while it obviouſly increaſed the inflammation, and rendered

the eyes more irritable. I therefore adviſed this remedy to be laid aſide. A quantity of blood was taken from the temporal artery of one ſide; ſuch veſſels as were turged upon the eye-balls were divided; ſcarifications were made in the inflamed parts of the eye-lids; poultices were applied over the eyes, in which opium and ſaccharum ſaturni were diſſolved; and gentle laxatives were preſcribed. By theſe means the pain ſoon abated; the inflammation and diſcharge of matter leſſened; and, in the courſe of a fortnight, no ſymptom of the diſeaſe remained, but a degree of irritability on expoſure to much light, with which both eyes continued to be diſtreſſed for five or ſix months thereafter.

In the courſe of the following year, on being attacked with Gonorrhœa, but of a more violent nature than the former, he was again ſeized, after expoſure to much cold, and riding on horſeback, to a ſimilar affection of his eyes. In this inſtance too, bloodletting, and the other remedies formerly preſcribed, proved ſucceſsful; and he has not, ſince that period, had any return of the diſeaſe.

About two years ago, I was deſired to viſit a patient, who, during confinement from a ſwelled teſtis induced by a Gonorrhœa, was ſuddenly ſeized with a profuſe diſcharge of matter from one of his noſtrils, very ſimilar to the running of a clap. The membrane of the noſtril appeared tender, and ſomewhat inflamed; but little or no pain occurred from it. The diſcharge from the urethra had diminiſhed conſiderably previous to the teſtis becoming inflamed, and, on this taking place from the noſe, it diſappeared entirely. This ſuggeſted the propriety of attempting to excite a return of the diſcharge by the urethra; but no advantage being derived from this, I adviſed the affection of the noſe to be treated with injections ſimilar to what we uſe in caſes of clap. An aſtringent ſolution was thrown up, ſometimes with a ſyringe, and at other times by inſerting a bit of ſponge immerſed in it up the noſtril; and in the courſe of a few days the running ceaſed entirely.

Since that period, the ſame patient has been twice affected in a ſimilar manner, and the ſame kind of treat-

ment proved equally ſucceſsful. No mercury was given, and no ſymptom of pox has ever appeared.

In the courſe of a few weeks after the recovery of this patient from the firſt attack of the diſeaſe, I was deſired to ſee a friend of his, who for ſeveral years had been diſtreſſed with a ſimilar diſcharge from both his noſtrils. The running had occurred during the continuance of a clap; and although it had frequently diminiſhed in quantity, yet at all times it was ſo conſiderable as to be productive of much uneaſineſs. No ulceration appeared on the membrane of the noſtrils, but it was of a deep red colour, and tender over its whole extent. A variety of remedies had been employed; and at laſt, after the diſeaſe had gone on for upwards of three years, although no other ſymptom appeared, he was adviſed to undergo a courſe of mercury. This was done in the moſt attentive manner; but no advantage enſued from it.

In this ſituation, I expected that the ſame plan of treatment which proved ſucceſsful in the preceding caſe, and which had alſo done ſo in others, would likewiſe anſwer here. In this, however, I was diſappointed; for, although every variety of injection was uſed that I ever employed, yet no material advantage enſued from them. The running was ſometimes indeed leſſened by them, but it always returned equally ſevere as before; and although it has of late, even when no remedies were employed, become conſiderably leſs, it ſtill continues in ſuch quantities as to prove highly diſtreſsful. No other ſymptom of the diſeaſe, however, has ever occurred.

As a farther proof of the difference of the contagions of Syphilis and Gonorrhœa, it may be remarked, that no ſtate of pox has ever been known to induce Gonorrhœa, which ſurely would occaſionally happen, if the two diſeaſes were of the ſame nature. We may alſo remark, that, in numberleſs inſtances, people have been poxed by the matter of Syphilis being by accident applied to a cut or a ſcratch, as often happens with ſurgeons in the dreſſing of chancres and buboes; but no one ever heard of a pox being got in this manner

from the matter of Gonorrhœa. It has indeed been ſaid, that chancres may be produced by inſinuating the matter of Gonorrhœa beneath the ſkin. But experiments upon this ſubject are productive of ſuch anxiety and diſtreſs, that they never have been, nor ever probably will be, repeated ſo frequently as the nature of it would require. Nothing, therefore, can be admitted from this argument; for, in order to avoid fallacy, and to give ſupport to the opinion, theſe experiments would not only require to be conducted with accuracy, but to be numerous, and to be repeated on a variety of patients under every poſſible variety of circumſtances; whereas we have heard of only a ſingle experiment or two being made by any individual; and even theſe ſeem to have been made under the management of ſuch as were ſtrongly and obviouſly biaſſed in favour of one ſide of the queſtion.

In oppoſition to theſe, too, I may mention, that, induced by ſome late publications upon this ſubject, two young gentlemen of this place have made ſome experiments upon themſelves, with a view to aſcertain the point in diſpute; but the reſult was materially different from what appears to have happened in the experiments to which I allude. By the introduction of the matter of chancres, as well as of buboes, into the urethra, ſome pain and irritation were excited, but no Gonorrhœa enſued; and, by fretting the ſkin of the prepuce and glans with a lancet, and rubbing the parts with the matter of Gonorrhœa, ſlight ſores were produced; but they never aſſumed the appearance of chancres, and they healed eaſily without the uſe of mercury.—For the reaſons mentioned above, however, we cannot place much dependence upon theſe or any other experiments that have yet been made upon this ſubject; we muſt truſt therefore to experience and obſervation in the ordinary courſe of practice for means to aſcertain it.

The other fact on which the doctrine we attempt to eſtabliſh reſts, is, that Gonorrhœa and Syphilis have appeared at different times in the ſame countries, and in

ſome inſtances have remained diſtinct and uncombined for a great length of time.

If theſe two diſeaſes were of the ſame nature, and proceeded from the ſame contagion, they ought to have appeared nearly at the ſame time in every country to which the infection was carried. This does not appear, however, from the hiſtory of the diſeaſe, to have been the caſe. From the earlier writers upon this ſubject, it is evident, that the Lues Venerea was known in Europe at leaſt forty years before the Gonorrhœa Virulenta. Doctor Aſtruc, whoſe accuracy and minute attention to this ſubject has not been equalled by any one, aſſerts, that in his time Gonorrhœa had not been long known in China, although we know that the Lues Venerea had long prevailed in that country: and it would appear, notwithſtanding of any thing that has been ſaid to the contrary, that the Lues Venerea was imported to the iſland of Otaheite a conſiderable time before Gonorrhœa. It ſeems to have been carried to that and other iſlands in the ſouth ſeas by the very firſt European navigators who touched there, and to have remained diſtinct, without being connected with Gonorrhœa, for a very conſiderable time; for when Captain Cook viſited theſe iſlands in his ſecond voyage, we have authority for ſaying, that Gonorrhœa had not then appeared in them.

Theſe hiſtorical facts all tend to prove, that where only one of theſe diſeaſes has been imported to any particular diſtrict, it has always remained diſtinct, without producing the other; and which we cannot ſuppoſe would have happened, if both were formed by the ſame contagion. And, in addition to theſe, I may add another, not leſs remarkable, the truth of which may be aſcertained by all who incline to inquire concerning it, as the ſcene of it lies in our own country.

In various parts of the country of Scotland, particularly in ſome parts of the Highlands; in Galloway, and in Dumfries-ſhire; the common people have, for

a great length of time, been afflicted with the Lues Venerea, under the denomination, as they term it, of Sibbens; and which, from thoſe diſtreſſed with it having no communication with thoſe infected with Gonorrhœa, has ſtill retained its original, unmixed form, without a ſingle inſtance, ſo far as I know, of Gonorrhœa, having been ever produced by it*. There is evidence, in ſome of theſe diſtricts, of this diſeaſe having prevailed among them for upwards of ſeventy years: Nay, in ſome of them, it is ſaid, from tradition, to have been left there by the ſoldiers of Oliver Cromwell, and to have been given, ſince that period, by one generation to another; and, although I have had opportunities of ſeeing many hundred people labouring under it, with ulcers in the throat, nodes of the bones, fungous excreſcences about the anus, blotches over the body, with almoſt every other ſymptom of Syphilis, yet not an inſtance has occured to me, as I have obſerved above, nor have I heard of any, where Gonorrhœa took place in it. Whether it is from thoſe infected with it concealing it longer than uſually happens in towns, or what may be the cauſe of it, I ſhall not at preſent pretend to determine; but certain it is that the ſymptoms produced by it are more inveterate than we uſually find them to be in the ordinary form of this diſeaſe. They appear to be more particularly infectious; the ſlighteſt communication with thoſe lobouring under the diſeaſe being apt to produce it. The ſymptoms ſpread more rapidly, and a greater quantity of mercury is, for the moſt part, required to remove them; but ſtill Gonorrhœa is never produced in any ſtage of the diſeaſe.

A diſeaſe very ſimilar to this broke out among the country people of Canada, ſome years ago, owing, as is imagined, to communication with ſome of the ſol-

* This muſt have happened from the diſeaſe in theſe diſtricts prevailing almoſt entirely among poor country people, whoſe manners do not expoſe them to the hazard of being infected with Gonorrhœa. None, however, can eſcape the Sibbens who are much in company with thoſe labouring under it; and ſo much are they convinced of its being the ſame diſeaſe with Lues Venerea, that even thoſe who get it in the moſt innocent manner, are ſo much aſhamed of it, that they never ſpeak of it as long as it can poſſibly be kept ſecret.

diers quartered among them, who were infected with Lues Venerea. It is attended, as is the case with the Sibbens in Scotland, with all the symptoms of Syphilis in the most virulent form of that disease; and it is so very infectious as to be communicated by eating or drinking out of the same vessel, or drying with the same cloth that has been used by those labouring under it. It often enters the constitution by absorption from the surface, without any previous ulceration: In which case it afterwards breaks out in buboes, nodes, ulcers, and other symptoms of a confirmed Lues; but not an instance, I am informed, has happened, of Gonorrhœa being produced by it.

This, as well as what has occurred in the progress of Sibbens, is precisely what happened with the Lues Venerea when it first appeared in Europe, as well as at a late period in the South Seas; and there cannot be a doubt of the same circumstances taking place wherever the Syphilis only is communicated. We have seen, in all these instances, that Gonorrhœa has never been produced by it, which surely could not have happened if the two diseases were of the same nature, and produced by the same contagion. They could never, in that case, have remained for any length of time so distinct and precisely marked; for the one must necessarily, in almost every instance, have soon been productive of the other.

As a farther support of this opinion, I may add, that if the two diseases were of the same nature, and produced by the same infection, the remedies proving useful in the one might be expected to prove likewise so in the other. Instead of this, we find that those upon which we depend with most certainty in Gonorrhœa, have no effect whatever in the cure of Syphilis, while mercury, which is the only remedy, as we have observed above, upon which any dependence can be placed for the cure of Syphilis, does not, in Gonorrhœa, produce any advantage. Nay, that in some cases, it evidently does harm.

We also know, that Gonorrhœa will often terminate whether any remedy be employed or not, merely

by moderate living, and keeping the parts regularly clean. The diſeaſe by this alone will, in moſt inſtances, become gradually milder, till at laſt it will diſappear entirely. No ſuch thing, however happens in Lues Venerea. In this as we have already remarked, even the mildeſt ſymptom becomes daily worſe, unleſs mercury be employed; nor will any practitioner of experience truſt the cure even of the ſlighteſt chancre to any other remedy.

Upon this evidence alone, of the method of cure of the two diſeaſes being ſo eſſentially different, we might I think, conclude that they are different in their nature, and that they proceed from different contagions. Were they of the ſame nature, and proceeding from the ſame cauſe, it is not poſſible to conceive that any medicine would act as a certain cure for one and do harm in the other, and yet every practitioner will admit that mercury, is the only remedy hitherto known, upon which we can depend for the cure of Lues Venerea, while it evidently often does harm, as I have already obſerved, in Gonorrhœa.

If the ſubject now under diſcuſſion was merely of a ſpeculative nature I ſhould not have entered ſo minutely into it, for in that caſe it would have been a matter of indifference both to practitioners and patients whether theſe diſeaſes were of the ſame nature or not; but, as the treatment of Gonorrhœa ought to depend much upon this circumſtance, I judged it proper, before proceeding to treat of it, to make this attempt to have the point in queſtion aſcertained.

CHAP. II.

Of the Gonorrhœa Virulenta.

SECT. I.

General Obſervations on the Symptoms, Cauſes, and Seat of Gonorrhœa Virulenta.

EVERY diſcharge of matter from the urethra, excited by impure coition, is termed Gonorrhœa Virulenta. As the term implies a diſcharge of ſemen, and as this diſeaſe is not neceſſarily attended with any ſeminal evacuation, it is here obviouſly miſapplied; but we think it better to retain even a faulty denomination when very univerſally received, than to incur the hazard ariſing from the confuſion which might enſue from the propoſal of amendments.

The period at which the diſcharge takes place, after expoſure to infection, is always uncertain. I have known it happen in a few hours; often in the courſe of a day or two, and in ſome inſtances not till ſeveral weeks have elapſed. From the third or fourth day, to the ſeventh and eighth, is the moſt frequent period.

This does not appear, however, to have any effect on the nature or violence of the ſymptoms. Some indeed have imagined, that the diſeaſe muſt be mild or ſevere according as it appears early or late after the matter of infection has been applied; but this does not accord with my obſervation. I have often known the ſymptoms mild when they appeared early after expoſure to infection, and ſevere when much time had elapſed. In one of the moſt obſtinate caſes of Gonorrhœa I have ſeen, the running did not appear till nearly the ninth week from the time of infection. A gentleman ſailed from Jamaica two days after having connection with a woman of ſuſpicious character. No

ſymptoms appeared till ſeveral weeks had elapſed; he concluded that he had eſcaped; when, two days before coming into port, being the fifty-eighth of his voyage, a very copious running appeared.

In ſome few caſes, the diſcharge takes place without the patient having any warning of its approach; but, for the moſt part, it is preceded by ſymptoms indicating ſome degree of inflammation in the urethra: A ſenſe of fulneſs and tightneſs is felt over all the under part of the penis; the patient has a more frequent deſire than uſual to void urine, accompanied with a peculiar kind of itching heat along the urethra, at the ſame time that the extremity of that canal is obſerved to be of a more deep red colour than ordinary, and more than uſually tender to the touch. In ſome caſes, too, the urethra ſeems to be contracted, or leſſened in its diameter; the urine coming off in a ſtream much ſmaller than natural, while at other times it is forked, and as if the paſſage was divided in two.

On the running appearance it is ſometimes white, and nearly of the conſiſtence of purulent matter; but, for the moſt part, it is thin, and of a yellow green colour. In ſome caſes it is brown, reſembling the diſcharge of old ſcorbutic ſores, and in others it conſiſts almoſt entirely of blood, owing to the eroſion or rupture of one or more blood-veſſels in the urethra. In a great proportion of caſes, the diſcharge of matter from the urethra, and ſcalding heat in making water, are the only ſymptoms which take place; but in others, theſe are accompanied with chordee, or painful involuntary erections; with much uneaſineſs in the teſtes, which frequently become ſo tender and irritable that the ſlighteſt touch excites pain. Severe degrees of pain often ſtretch from the penis to the groins and thighs; and in ſome caſes over all the abdominal viſcera, particularly over the under part of the belly.

In ſome caſes the chordee, and in others theſe ſympathetic pains ſtretching to the groins, and contiguous parts, are the moſt diſtreſsful ſymptoms of the diſeaſe,

I have known the latter ſo ſevere as to render the patient altogether unable to take any kind of exerciſe; while the chordee, which is uſually worſt in bed, is apt to deprive him entirely of ſleep.

Beſides theſe pains in the parts contiguous to the penis, and which we ſuppoſe to be chiefly the effect of nervous irrability, the glands in the groin in ſome inſtances ſwell, and become hard; but unleſs the running be accompanied with chancres, theſe ſwellings very commonly ſubſide, and do not proceed to ſuppurate; an important fact, which may be conſidered as an additional proof to what was mentioned in the laſt chapter, of the difference between Gonorrhœa and Lues Venerea.

In the courſe of the diſeaſe the glans penis ſometimes becomes red and inflamed, and a yellow, fœtid matter, oozes from its whole ſurface. In ſome caſes this is accompanied with evident ulceration: in others the ſkin remains entire, and the matter is obſerved, upon preſſure, to proceed from an infinite number of ſmall points. In both they are ſuppoſed to proceed from the matter paſſing out of the urethra, and allowed, by the negligence of the patient, to reſt too long upon the tender cuticle of the glans.

In ſome caſes, however, this inflammatory affection of the glans, and diſcharge with which it is accompanied, takes place of itſelf, and without any diſcharge from the urethra. In which caſe, from the reſemblance which the matter bears to that of Gonorrhœa, it has uſually been termed Gonorrhœa Spuria. This inflammation, in ſome caſes ſpreads to the prepuce, in which it very commonly produces ſome degree of contraction. When the prepuce becomes ſo much ſtraitened that it cannot be drawn back, a diſeaſe is formed, which we term phymoſis; and, when it contracts behind the glans, a diſeaſe termed paraphymoſis takes place.

Although in Gonorrhœa ſome degree of uneaſineſs is uſually felt along the whole courſe of the urethra, yet we know, that in moſt inſtances, the ſeat of the diſeaſe lies within an inch, or little more, of the point

of the penis, In a few cafes, however, whether from maltreatment of the diforder; from the nature of the infection being more than ufually virulent, or from peculiarity of conftitution of the patient, the difeafe fpreads backward till it extends over the whole length of the urethra, even to the bladder itfelf. The proftrate gland and internal coat of the bladder become affected, and fympathetic pains ftretch from thefe parts along the ureters to the kidneys.

When the bladder becomes in this manner difeafed, the ftate of the patient is, for the moft, extremely miferable: he feels almoft a conftant defire to make water, accompanied with fevere preffure or bearing down upon the affected parts, proceeding from involuntary fpafmodic contractions of the abdominal mufcles. The whole region of the loins, particularly about the kidneys, becomes fo painful and irritable, that much diftrefs is excited by whatever tends to bring the mufcles of thefe parts into action, and the patient often complains of a conftant teneſmus, and of a frequent fhooting pain about the anus and neck of the bladder.

In this ftage of the diforder there is feldom any conſiderable difcharge from the urethra; but, for the moft part, a large quantity of very vifcid-fœtid-mucus is difcovered in the urine, which, in the courfe of a few hours, fubfides, and adheres fo firmly to the ſides of the veſſel as not to be eaſily ſeparated.

When a Gonorrhœa has either been improperly treated, or when much inflammation takes place from any other cauſe, the teſtes are apt to ſwell and inflame, and abſceſſes often form in Cowper's glands, as well as in other parts of the urethra. When theſe burſt outwardly, or when the urine by any means finds acceſs to them, they are often productive of great diſtreſs to the patient and perplexity to the practitioner, as they frequently baffle every attempt that is made for removing them.

It will readily be conceived that all the ſymptoms we have deſcribed are ſeldom or never met with in the ſame patient, and that theſe which do take place

will be in very different degrees in different cases. This is particularly remarkable with respect to the quantity of discharge, which, in some instances, is so trifling as scarcely to excite any inconvenience, whilst, in others it is so profuse as to prove highly distressful. In some cases too, the heat of urine is so inconsiderable as not to deserve notice; and in such instances also, the desire to pass water is seldom very frequent, while, in others, these symptoms are both so unsupportable as to render the patient miserable.

In most instances of Gonorrhœa any external inflammation which occurs is confined to the extremity of the urethra; but, in some cases, it runs so high as to spread over the whole glans, where it might be expected to terminate, as inflammatory affections in other parts of the body most frequently do, in the formation of abscesses. This, however, very rarely happens. We have observed, above, that, in a few instances, a purulent-like matter oozes from the whole surface of the inflamed glans; but I have scarcely known an instance of any extensive abscess in the substance of the glans. The inflammation, for the most part, terminates by dispersion. In a few cases it ends in mortification.

In women the symptoms of Gonorrhœa are, for the most part, much milder than in men. It sometimes happens that a flow of matter is all that occurs; and, as the discharge is very similar to the matter of fluor albus, the two diseases are often mistaken for one another.

This absence of pain, however, takes place only where the vagina is the seat of the disease. When the urethra becomes affected the symptoms are nearly the same as in the other sex. A distressful degree of irritation occurs at the extremity of the urethra, accompanied with heat of urine, and a very frequent desire to pass water. In some cases the inflammation spreads to the bladder, and even to the kidneys, uterus, and ovaria; or at least these parts come to be so much affected with pain as to give cause to suspect

that they are in a ſtate of inflammation. Pain, even in a ſevere degree, will no doubt occur from nervous ſympathy, and this I believe to be frequently the caſe here; but I have met with different inſtances of a conſiderable degree of inflammation being excited by Gonorrhœa in all the parts which I have mentioned: that is, they have become ſwelled hard, and exceſſively painful, inſomuch that the ſlighteſt touch would create a great degree of uneaſineſs; and bloodletting, with other evacuations, were the only remedies from which relief was obtained. In ſome caſes the matter is ſo ſharp and acrid as to excoriate the clitoris, nymphæ, and labia pudendi. This excites a great deal of uneaſineſs; more than ever takes place in men from a mere affection of the external parts; for, as theſe parts are in women preſſed upon in ſitting, the ſlighteſt degree of inflammation is, from this cauſe alone, productive of much diſtreſs. They are often obliged to remain conſtantly in bed; being unable either to walk, ſtand, or ſit.

It is impoſſible, in any caſe of Gonorrhœa, to determine at firſt, in what manner it will terminate, for we often find the moſt ſevere, as well as the moſt obſtinate diſcharge, ſucceed to ſymptoms of the mildeſt nature, while in ſome caſes it ends quickly and eaſily, where the ſymptoms at firſt were very ſevere. It is in general believed that the diſeaſe will be mild, and of ſhort duration, where the running is white or yellow; and, on the contrary, that it will neceſſarily prove ſevere and tedious, where it is at firſt green, or much tinged with blood. This, however, is by no means univerſally the caſe, for inſtances occur daily, of the running proving tedious, where it was at firſt of the colour and conſiſtence of purulent matter, while others often happen of its ending quickly, where the matter was at firſt either deeply tinged with blood, or of as deep a green as this diſcharge has ever been obſerved.

In the progreſs of this diſeaſe, we always reckon it a favourable circumſtance to obſerve the matter be-

come thick and ropy. This cannot indeed be mentioned as an infallible proof of the diſcharge being ſoon to terminate; but it is, undoubtedly, one of the moſt favourable occurrences in every caſe of clap. When the running does not ſoon become ropy, it is apt to terminate in gleet, the moſt perplexing ſymptom in this diſorder, and of which we ſhall ſpeak more particularly in an enſuing chapter.

We ſhall hereafter have occaſion to obſerve that a diſcharge may be produced from the urethra by different cauſes, very ſimilar to the matter of Gonorrhœa virulenta. At preſent it is only neceſſary to remark, that, in this diſeaſe, the diſcharge is obviouſly the effect of irritation excited in the membrane of the urethra and contiguous parts, by matter from an infected perſon being applied to them.

Some difference of opinion has ariſen of the manner in which the matter of infection is communicated to the urethra. By ſome it is ſuppoſed to happen in conſequence of being firſt abſorbed from the ſurface of the glans, and afterwards depoſited on the membrane of the urethra; as they do not think that it can paſs directly into the urethra, during coition. No good reaſon, however, can be given for this opinion: it appears more probable that the matter at firſt finds acceſs between the lips of the urethra; that it afterwards ſpreads, in a gradual manner, along the paſſage, by mixing with the mucus, with which it meets, and that the progreſs which it makes will, in a great meaſure, depend upon the parts to which it is applied being more or leſs ſuſceptible of inflammation; upon the general ſtate of health of the patient; upon his manner of living; and perhaps upon other cauſes.

I do not conceive, however, that the kind of matter by which the diſcharge is produced has ſo much influence on the violence or duration of the ſymptoms as has been imagined. It is indeed the opinion of ſome that a ſevere and obſtinate caſe of clap may always be traced to an infection of ſome peculiar degree of virulency; but this will not be found to happen with

any kind of uniformity. So far as my obſervation goes; it is in Gonorrhœa nearly the ſame as in ſmall pox. The mildneſs or violence of ſymptoms does not depend upon the matter by which the diſeaſe is produced ſo much as upon other circumſtances. Hence the ſame woman will, under the ſame infection, communicate the moſt virulent ſymptoms to one perſon, and the mildeſt to another.

That much depends upon the habit of body of the patient, and upon his manner of living, will ſcarcely be doubted; but the following fact renders it obvious. Three gentlemen, who aſſociated much together, and who were accuſtomed to live freely, returning one night from a drinking club, reſolved to viſit a girl of the town, and to take a friend along with them who had that night been a viſitor in their ſociety, but who uſually lived with much ſobriety. They all had connection with the ſame girl. The three aſſociates had all the moſt ſevere claps I ever met with; while the other, who alſo received the infection, had the diſeaſe in the mildeſt form. This would not, in ſimilar circumſtances, always happen, as we ſometimes find people who live with much circumſpection, liable to very ſevere attacks of Gonorrhœa; but, for the moſt part, the degree of violence of this diſeaſe has a conſiderable dependence on the manner of living of the patient.

The matter diſcharged in Gonorrhœa being very ſimilar to what is daily obſerved, to flow from ſores in other parts, and the quantity being often very conſiderable, it was the prevailing opinion, till of late, that it proceeded from ſores or ulcers in the urethra. We now know, however, that ulcers very ſeldom take place here; and, when they do, that they may be traced to ſome accidental cauſe, ſuch as the rupture of a blood-veſſel, in no degree neceſſarily connected with the exiſtence of the diſeaſe. On diſſection, after death, it is found, almoſt in every inſtance, that the membrane of the urethra is entire, and that the matter is produced by inflammation alone.

It had long been known, that instances were occasionally met with on dissection, where no degree of ulceration in the urethra was discovered. This, however, was considered as a singular occurrence, and that it never happened but where the symptoms were uncommonly mild; for at that time it was supposed, that ulceration, or a destruction of parts, was requisite for the production of matter. But we now know, that this is by no means the case, and that an inflamed surface, even where no abrasion is perceived, will produce all the varieties of matter which sores ever afford, and that different kinds of animal fluids may be converted into these, merely by being kept in certain degrees of heat.

By this the difficulty is removed, which otherwise we must have experienced in accounting for the large quantities of matter daily discharged from the urethra in Gonorrhœa; which, in some cases is so considerable, that nothing less than an affection of the whole extent of that canal could afford it. Now those who imagine that the matter proceeds from ulcers, have never gone so far as to say that this ever takes place: nor could it probably occur, but with such consequences as very seldom ensue from Gonorrhœa. What I allude to forms an unanswerable objection to the idea of ulcers being frequent in this disease, even although no opportunities had occurred of proving it by dissection. Where the membrane of the urethra is in any point ruptured, either by the bursting of an abscess into it, or by any other cause, the most distressful consequences almost universally ensue; for the urine passing into the contiguous parts, forms swellings, which usually terminate in fistulous openings, that prove always tedious, and of uncertain event. Every practitioner knows, that even the slightest opening into the urethra is apt to terminate in this manner; so that, if the matter of Gonorrhœa proceeded from ulceration, the consequences of almost every case of Gonorrhœa, would necessarily prove much more formidable than we ever, in any instance, find them to be.

In cafes of long continued Gonorrhœa, the membrane of the urethra is apt to be fo relaxed, that fungous excrefcences form in different parts of it. Thefe not only impede the paffage of the urine, but, becoming foft and tender, they at laft ulcerate, and throw out very confiderable quantities of matter. This, however, is never to be confidered as the caufe of Gonorrhœa, but merely as the effect of it. It often proceeds from mifmanagement, either on the part of the patient or practitioner; and fometimes from fome conftitutional affection to which the patient at the time may be liable.

Inftead of ulceration, we find, that in a great proportion of cafes, there is merely a flight degree of inflammation, extending from the extremity of the glans to an inch or perhaps an inch and a half up the urethra. In more obftinate cafes of clap, Cowper's glands, with their ducts, which terminate in the urethra, are found affected. In a third ftage of the difeafe, the proftrate gland, and contiguous parts of the urethra, are inflamed; and in the fourth, and what may be reckoned the moft diftrefsful ftage of clap, the internal coat of the bladder is found inflamed. For the moft part, the inflammation is confined to the neck of the bladder; but I have met with inftances of its being perceptible over the whole of it, and of its even extending along the ureters to the kidneys.

This inflammation, however, is chiefly obvious at firft. On a long continuance of the difeafe, the parts affected, inftead of being either inflamed, or in a ftate of ulceration, are of a more pale colour than natural; the membrane of the urethra is found foft and relaxed; and coloured mucus or matter may be preffed out from an infinite number of fmall points over every part of it that has been difeafed.

This is precifely what happens with every membrane that has remained long under a flight degree of inflammation, particularly with the membrane of the nofe and trachea. Thefe parts often afford very confiderable quantities of matter, or of mocus very much

reſembling matter, for a great length of time: and yet, upon diſſection, they are ſeldom or never found in a ſtate of ulceration, the membrane being for the moſt part only ſlightly inflamed. We may here indeed remark, that the reſemblance between the two diſeaſes, Gonorrhœa and Catarrh, is, in certain ſtages of each of them, very remarkable. They ſeem both to originate from inflammation excited upon a membrane. The matter of the one is in many inſtances very ſimilar to that of the other. They ſeem both to be local affections only; and the parts on which they are ſeated are, after death, found to be affected in a ſimilar manner.

But although, in the latter ſtages of Gonorrhœa, in which chiefly opportunities occur of examining the ſtate of the parts after death, the inflammation is found to be for the moſt part inconſiderable, yet, in the commencement of the diſeaſe, the parts are often highly inflamed, particularly when thoſe about the neck of the bladder are affected. This is obvious from the ſymptoms; particularly from the violent pain which always takes place, and from the antiphlogiſtic remedies employed for the cure of the diſeaſe.

SECT. II.

Of the Prognoſis in Gonorrhœa Virulenta.

IN every diſeaſe, it is of importance for a practitioner to be able to ſay at what time and in what manner it will terminate. In none is information of this kind more anxiouſly wiſhed for than in Gonorrhœa. The hopes and fears of patients lead them equally to wiſh for it; but, from various cauſes, and more particularly from want of attention to the exact ſite of the diſeaſe, the duration of Gonorrhœa has always been a matter of much uncertainty.

I have obſerved above, that, on diſſection, four different ſet of parts are found at different times to be

the ſeat of Gonorrhœa. When the running proceeds from the extremity, or from within about an inch and a half of the extremity of the penis, as happens in perhaps nine caſes out of ten, there will, for the moſt part, be much cauſe to hope that a cure will ſoon be obtained. In ſuch inſtances, when the patient is otherwiſe in good health, and when he does not interrupt the operation of the neceſſary remedies by improper conduct, the diſeaſe will not commonly endure a fortnight. Nay, a cure in ſuch circumſtances is often obtained in two or three days: but, whenever the lower parts of the urethra are affected, particularly when the proſtrate gland and other parts about the neck of the bladder are diſeaſed, the running, in almoſt every inſtance, proves obſtinate. Even our moſt powerful remedies in other caſes of clap are here doubtful in their effects. Hence no certain opinion can be formed of the event of the diſeaſe.

When theſe deep-ſeated parts are affected, the diſeaſe proves always tedious, whatever the habit of body may be; but it neceſſarily proves much more ſo when the conſtitution labours under any general affection, particularly when ſcrophula prevails, than when the patient is ſound and healthy. Indeed a ſcrophulous taint exiſting even with the moſt ſimple caſe of clap, is apt to render it obſtinate; I am ſo much convinced of this being the caſe, that in every inſtance of clap occurring in ſcrophulous patients I always give a guarded prognoſis of the event. Cures are ſometimes indeed obtained eaſily, even in patients of this deſcription; but, for the moſt part, the diſcharge goes on for a great length of time, and reſiſts the effect of every remedy we employ to remove it.

This uncertainty which takes place in the treatment of Gonorrhœa, and the great length of time to which the diſcharge, in ſome inſtances goes on, together with the many untoward and unexpected occurrences which often happen during the cure, tend altogether to render this branch of practice the moſt diſtreſsful of any in the province of medicine. In a great pro-

portion of cases a cure with proper treatment is easily and speedily obtained; but every candid practitioner will admit that cases often occur in which the discharge continues obstinate for a great length of time, even under the use of the most powerful remedies with which we are acquainted. But, by distinguishing between one stage of the disease and another, and thus giving an opinion to patients of the probable event of it practitioners would avoid a good deal of embarrassment which they often experience, from giving so indiscriminately as they commonly do, a favourable prognosis at the commencement of every case of clap.

In forming a prognosis, it ought always to be kept in view, that however mild the symptoms may be at first, they may very quickly and unexpectedly become severe, by the disease proceeding from one part of the urethra to another, or even by the inflammation in the part which was at first affected becoming more severe. This arises from various causes, and often from circumstances which it is not in the power of practitioners to prevent. It sometimes occurs, indeed, from the use of improper remedies; particularly from acrid injections being used with too much freedom; but it happens much more frequently from other causes, particularly from the tendency which inflammation in one part of a membrane has to spread itself over the whole of it, and to the misconduct of patients, who, instead of living as they ought to do, very commonly proceed, during the cure, in the same course of riot and debauchery by which they were at first exposed to infection. Some patients, even under such circumstances, will no doubt get well; but there is not a more undoubted fact than this, that the cure of the disease is for the most part both difficult and uncertain where the patient lives in a riotous and intemperate manner.

SECT. III.

General Obſervations on the Cure of Gonorrhœa Virulenta.

GONORRHŒA, as I have obſerved above, has, till of late, been very generally conſidered as depending upon an affection of the conſtitution; or at leaſt the diſcharge has been ſuppoſed to be of ſuch a nature as at all times to affect the conſtitution, and therefore that a cure could not be obtained but by the uſe of remedies which operate upon the ſyſtem at large.

For a conſiderable time mercury was chiefly relied upon. It was employed on the ſuppoſition of Gonorrhœa being a ſymptom of Lues Venerea; but experience having ſhewn that no advantage was derived from mercury by itſelf, other remedies were employed along with it. Theſe conſiſted chiefly of demulcents, evacuants, and aſtringents.

By a plentiful uſe of mucilagenous drinks, and other demulcents, it was meant to ſheath the bladder and urethra more effectually from the acrimony of the urine, and at the ſame time to render the urine itſelf leſs acrid. Purgatives were employed for the purpoſe of carrying off the morbid matter of the diſeaſe, and nitre and other remedies were given with a ſimilar intention; and laſtly, as the running was ſeldom leſſened by the uſe of any of theſe, but, on the contrary, being frequently increaſed, bark, aſtringent balſams, and other corroberants, were preſcribed for putting a ſtop to it. In ſome caſes mercury was continued during the whole courſe; in others it was left off at the time of entering upon the uſe of aſtringents.

The practice of phyſic when this prevailed being in moſt points highly improved, we are aſtoniſhed to find ſuch deficiency as this evinces, in the treatment of a diſeaſe which neceſſarily fell under daily obſervation. If patients had been left to themſelves, without any in-

terference on the part of practitioners, the diſeaſe would often, in the courſe of time, have diſappeared without any injury being done to the conſtitution; for we know that a ſimple clap will, in moſt inſtances, dry up whether any remedies be employed or not; but, by the liberal uſe of ſtrong purgatives, and eſpecially when this was conjoined with a low diet and a courſe of mercury, the conſtitution was ſo much debilitated that this alone rendered almoſt every caſe that occurred exceedingly obſtinate: hence Gonorrhœa was conſidered as the moſt diſtreſsful as well as one of the moſt dangerous diſeaſes to which the human ſpecies was liable. Lues Venerea was, for the moſt part, eaſily cured by mercury; but no advantage was derived from this remedy in Gonorrhœa: the diſeaſe uſually proved exceedingly obſtinate, and was very apt to terminate either in gleet or in obſtructions of the urethra.

It ſoon appeared to practitioners of obſervation, that the medicines employed in Gonorrhœa, inſtead of proving uſeful, rather did harm; but the period was not yet arrived in which a more effectual remedy was to be propoſed. Some, however, went ſo far as to ſay that medicines of every kind might be avoided, as they had found, from experience, that the diſeaſe went off both more eaſily and more quickly when left to itſelf than it ever did with the remedies at that time in general uſe. A low diet, mercury, and evacuants of different kinds, did much harm, as we have already obſerved, by inducing ſuch a degree of debility and relaxation as materially affected the conſtitution; and the draſtic purgatives, of which large dozes were given daily, proved highly prejudicial, by the irritation which they excited. In certain ſtages of clap a ſtrong purgative never fails to increaſe the pain; to excite a more frequent deſire to make water; and to increaſe the diſcharge: nay, I have known various inſtances of a return of all the ſymptoms of Gonorrhœa being induced by the operation of a briſk purgative, long after the patient conſidered his cure as complete.

We need not therefore be ſurpriſed at the propoſal of laying all ſuch remedies as theſe aſide; and it muſt be admitted that a cure will often take place, that is, the running would diſappear, together with all the ſymptoms which attend it, without the aid of medicine. This would frequently happen where the diſeaſe was mild; where the patient was poſſeſſed of a healthy conſtitution; and where the running was not kept up by any impropriety on the part of the patient. The running would diſappear here, as happens in corryza and other inſtances of matter proceeding from inflamed ſurfaces, whether any remedies ſhould be employed or not: but this would ſeldom or never happen where the ſymptoms were ſevere, nor where the patient did not live in every reſpect as he ought to do. In all ſuch caſes the cure would prove tedious and uncertain, and the conſtitution would frequently be ruined, in the attempt.

When the mode of cure we have mentioned was propoſed, an opinion prevailed that the diſcharge was kept up by ſome general affection of the conſtitution, and that nothing therefore could be ſo ſafe or ſo proper as to allow it to run as long as any part of the morbific matter by which it was produced continued. It was at that time admitted by all, that Gonorrhœa was of the ſame nature with Lues Venerea. Chancres, as well as all other venereal ſores, were kept open till cures were obtained by the internal uſe of mercury. An erroneous idea prevailed of ſome advantage being derived from the diſcharge which they produced; and hence, even by thoſe who ſaw clearly that no benefit was obtained from mercury in Gonorrhœa, it was ſtill conſidered as the beſt practice to allow the diſeaſe as they ſaid, to diſcharge itſelf in this manner.

Even granting that the matter of Gonorrhœa were the ſame with that of Lues Venerea, there is no cauſe to imagine that any advantage would enſue from this practice: but we now have no reaſon to doubt of the two diſeaſes being perfectly different. A practice, therefore, which at one period might have been judg-

ed proper in one diſeaſe, would now be inapplicable in the other; and hence it has, very generally, been laid aſide, although not yet given up by ſome individuals.

From the obſervations we had occaſion to make in the laſt chapter, as well as from other circumſtances, few will now doubt that the matter in Gonorrhœa proceeding in moſt inſtances from an inflamed ſtate of the membrane of the urethra and contiguous parts, gives a local affection only, without being productive of any general diſeaſe of the conſtitution. From this view of the ſubject, it is obvious that no great advantage is to be expected from remedies applied to the ſyſtem at large, and that a cure is to be looked for from the uſe of local remedies only. In the treatment of a ſimple ſore, of a cut, a burn, or excoriations from any cauſe whatever, we would not ſurely expect to ſucceed by mercury, purgatives, or any remedies directed to the conſtitution. In all ſuch affections we truſt to local remedies, unleſs the preſence of fever, or ſome other general affection, render other remedies neceſſary. For the ſame reaſon we ought, in Gonorrhœa, to depend entirely upon ſuch remedies as act chiefly upon the parts affected; no others being neceſſary if it be not occaſional blood-letting, and other evacuations, and theſe only where fever, plethora, or much inflammation take place.

In local affections of other parts our remedies are eaſily and directly applied: in the urethra ſome nicety and attention is neceſſary, not only in the mode of applying them to the diſeaſed parts, but in judging of the period of the diſeaſe, or rather of the ſtate of the parts to which they are to be applied: in other ſituations theſe circumſtances fall directly under view, and we judge from appearances of the propriety of applying one remedy or another. In the urethra we are directed entirely by the ſymptoms, and we judge from theſe of the remedies to be employed, as well as of the parts to which they are to be applied being in a fit ſtate for receiving them or not.

If the parts affected in Gonorrhœa were always the same no difficulty would occur in the application of our remedies; but, although the matter in the commencement of the diseaſe proceeds in perhaps every inſtance from inflammation, yet, in ſome, parts are affected with inflammation, to which it would be improper and even hazardous to apply the ſame remedies which in a great proportion of caſes are uſed with much ſafety and advantage.

We ſhall afterwards have occaſion to ſhew that, in certain circumſtances of Gonorrhœa, bougies may be uſed with much benefit; but, for the moſt part, we depend entirely upon injections, and chiefly upon ſuch as are of a drying, aſtringent nature. Now it is obvious, that although we may with ſafety apply an aſtringent ſolution to an inflamed ſurface, as happens daily where the membrane of the urethra only is affected, yet that much riſk may enſue from the ſame ſolution being applied to the ducts of inflamed glands: in the one caſe the diſcharge produced by the inflammation will be leſſened and ſoon removed, and the inflammation itſelf will ſubſide, while, in the other, by a ſudden ſtop being put to the diſcharge of a gland already in a ſtate of increaſed irritability, more inflammation will be excited, the parts affected will become ſwelled and painful, and at laſt the diſcharge will burſt forth with redoubled violence.

That this frequently happens in the courſe of buſineſs every practitioner of candour will admit: nay, there are few patients who have been liable to different attacks of this diſcharge, who have not met with it in ſome degree. For a day or two the running will often diſappear, and they conſider the cure as complete, when after ſome degree of tenſion and uneaſineſs along the greateſt part of the penis, particularly in the perineum, the diſcharge recurs as before, with every appearance of a recent infection.

As there are many who condemn the uſe of injections in Gonorrhœa, it is alledged that this is one of the inconveniences which they produce; but we ſhall preſently have occaſion to ſhew that this is by no

means the caſe, and that it proceeds entirely from a miſapplication of the remedy; from uſing it in a ſtate of the diſeaſe for which it is improper; and not from the remedy itſelf being of a hazardous nature.

This leads us to revert to the neceſſity there is for diſtinguiſhing between one ſtate of Gonorrhœa and another. In the deſcription of the ſymptoms, I remarked that they are evidently diſtinguiſhable into four ſets, indicating four ſtates or ſtages of the diſeaſe; and as it is a point of the firſt importance in practice to have theſe different ſtates clearly marked, we ſhall now proceed to treat of them in ſeparate ſections.

SECT. IV.

Of the Firſt Stage of Gonorrhœa.

IN the firſt ſtage of Gonorrhœa the running is never accompanied with violent ſymptoms. The extremity of the urethra becomes red, full, and ſomewhat prominent. The glans become tender and irritable, and ardor urinæ takes place in a greater or leſſer degree, according to the extent of the inflammation. For the moſt part the heat of urine is inconſiderable; but in ſome inſtances, even in this ſtage of the diſeaſe, it is ſo ſevere as to excite a good deal of diſtreſs. Chordee ſometimes occurs, but ſeldom in any conſiderable degree.

In the hiſtory of the diſeaſe we have ſeen, that in this ſtage of it the membrane of the urethra alone is affected, that is, the inflammation by which the diſcharge is produced has not extended to any other part.

We judge that this is the caſe when theſe ſymptoms only occur which have juſt been enumerated; when no glandular ſwellings are diſcovered along the courſe of the urethra, and particularly when the running proceeds entirely from within an inch, or an inch and a half of the extremity of that canal.

This circumſtance of the diſcharge in Gonorrhœa proceeding from the extremity of the urethra, is at all times a proof of the inflammation not having advanced farther than to conſtitute what I have denominated the firſt ſtage of the diſeaſe. No glandular ſwellings are ever diſcovered while the running proceeds from theſe parts; and on diſſection after death, the membrane of the urethra alone is found inflamed: but in ſome inſtances the diſcharge proceeds even from the ſuperior parts of the urethra, while none of the contiguous glands are affected. This I conſider as conſtituting the firſt ſtage of the diſeaſe, equally as when the extremity of the urethra is alone affected. The ſymptoms are not more violent in the one than in the other, and the method of cure is the ſame in both. It muſt, however, be admitted, that we do not frequently meet with this; for where the upper part of the urethra is affected, the inflammation is very apt to ſpread to the contiguous glands, and thus terminates in the ſecond, third, or, perhaps, fourth ſtage of the diſeaſe.

We aſcertain the place in the urethra, from whence matter is diſcharged, not merely from the height to which the pain or uneaſineſs with which it may be accompanied extends, for this proves often an equivocal mark of diſtinction, but from compreſſing the paſſage at any given ſpot, and preſſing out all the matter between it and the end of the urethra. If, on removing the preſſure, more can be brought down, we are ſure that it muſt come from a greater height, and by proceeding in a gradual manner upwards we may thus, with very little attention, diſcover almoſt the exact ſpot from whence the diſcharge proceeds. It will afterwards appear that our being able to do ſo is of importance in conducting the cure.

From what has been ſaid it will appear, that in this ſtage of the diſeaſe the running proceeds entirely from inflammation of the membrane of the urethra, without any affection of the glands which open into it; and in the removal of this the cure entirely conſiſts.

Where the inflammation is conſiderable, as we judge to be the caſe when the ardor urinæ is ſevere, and eſpecially when it occurs in a very full habit of body, it may be proper to preſcribe blood-letting, a doſe or two of any gentle laxative, and a low, cooling diet. At the ſame time violent exerciſe of every kind ſhould be avoided, particularly riding on horſeback.

Inflammation, however, in this ſtate, is ſeldom ſo conſiderable as to render blood-letting neceſſary: in ordinary caſes we now truſt to the uſe of injections alone, and in all periods of the diſcharge I uſe them with equal freedom. Even where blood-letting, and a ſtrict attention to an antiphlogiſtic regimen is neceſſary, I have never any difficulty in beginning immediately to the uſe of injections.

Thoſe who are not in the daily practice of uſing injections, are afraid of preſcribing them ſo generally as they ought to do: ſome, indeed, never employ them in any caſe, from the prejudice being ſtrong which ſtill prevails againſt them among almoſt all the older practitioners, while others admit that they may be uſed with ſafety and advantage, in the latter period of the diſeaſe, but never in the beginning, or while the inflammation continues in any degree ſevere.

This, however, is a timidity that will ſoon vaniſh with all who venture upon a more general uſe of them. They will find that injections, of a ſufficient degree of aſtringency for removing the diſcharge, may in this ſtate of Gonorrhœa be employed with perfect ſafety, even in the commencement of the diſeaſe, and whether the inflammation which takes place be mild or ſevere.

An idea is ſtill entertained by many, that the running ſhould not be ſtopped till ſome of the virulency by which it was produced is carried off; and hence they object, as we have juſt obſerved, to the early uſe of injections. But, as we have ſeen that Gonorrhœa is a local affection, and as we know that in other parts of the body local inflammation may at all times be removed with ſafety, nay, that it is the beſt practice

to attempt it, we might from this alone infer, that it would be equally proper here. But independent of this, I can with confidence aſſert, and all who employ injections generally will do ſo, that they may in this ſtage of Gonorrhœa be uſed at all times, and with more certainty of proving ſucceſsful the more early they are applied. Of this I am ſo clearly convinced, that I would adviſe all who have it in their power, to employ injections inſtantly on the diſcharge taking place. They commonly, indeed, prove ſucceſsful at whatever period they are uſed; but I have uniformly found that they act more quickly in the commencement of the diſeaſe than in the latter ſtages of it.

While practitioners differ in opinion reſpecting the moſt proper period of Gonorrhœa for uſing injections, they likewiſe differ in their ideas of the kinds of theſe remedies beſt calculated for the periods in which they are employed. In the commencement of Gonorrhœa, and at all times when much pain takes place, it is the opinion of many that emollient injections only ought to be uſed, ſuch as warm oil, emulſions of almonds, infuſions of althea, and lintſeed: but in this there appears to be ſome miſtake; and I can decidedly ſay ſo from having often experienced the inefficacy of the practice.

On firſt entering upon buſineſs, I found it the opinion of many who uſed injections with freedom, that thoſe of the emollient kind ought alone to be adviſed while much heat of urine, or any conſiderable degree of inflammation continued. Theſe, it was imagined, would ſheath and protect the parts from the acrimony of the urine, and on the inflammation ſubſiding, they conceived that injections of an aſtringent nature might be uſed with more ſafety. The opinion was plauſible, and ſupported by ſome of our beſt practitioners; I was therefore induced, along with others, to go into it; but it ſoon appeared that no advantage was to be derived from it: on the contrary, it was evidently the cauſe of much diſtreſs, by rendering the cure of Gonorrhœa much more tedious than it otherwiſe might

have been; for injections of the emollient kind never tend to ſhorten the continuance of the diſcharge, and often render it more fixed and permanent, by relaxing the parts from whence it proceeds.

Neither are injections of this deſcription neceſſary as a preparative to thoſe of the aſtringent kind. From this conviction I have for many years paſt laid them altogether aſide, and during this period have uſed none but ſuch as are evidently aſtringent; and although I employ them with all manner of freedom, I have never perceived any bad effects ariſe from them.

In this ſtate of Gonorrhœa injections of the aſtringent kind may be uſed with ſafety and advantage, from the very commencement of the diſcharge, as well as at any period of the diſeaſe, whatever the degree of inflammation may be. Inſtead of increaſing the inflammation, they tend, when of a proper ſtrength, to leſſen it; they relieve more immediately than any other remedy, the ardor urinæ; and they commonly leſſen or remove the diſcharge in a very ſhort ſpace of time.

In all caſes, therefore, of this kind, where we ſuppoſe the diſeaſe to proceed entirely from the membrane of the urethra, I pay no regard to the continuance of the running; the patient is immediately put upon the uſe of injections, and no harm ever enſues from it.

There is only one ſymptom which, in this ſtage of clap, precludes the immediate uſe of injections, viz. pain and ſwellings of one or of both teſtes: a perſeverance in the uſe of injections during the continuance of this ſymptom very commonly does harm, and ought not therefore to be adviſed; not that they tend to increaſe the inflammation, even of the teſtis, but by removing the diſcharge from the urethra, they deprive us, as we ſhall afterwards ſee, of one of the moſt effectual remedies for a ſwelled teſticle, proceeding from Gonorrhœa.

A variety of aſtringent injections are employed by practitioners, but ſome proving more effectual than others, an inveſtigation of this part of our ſubject is thereby rendered neceſſary.

Almoſt any aſtringent injection will leſſen the diſcharge. Port wine, and claret, duly diluted, ſometimes anſwer. I have often ſucceeded with a teaſpoonful of brandy added to half an ounce of roſe water: nay, roſe water itſelf, or even cold water directly from the ſpring, will often give a ſtop to the diſcharge; but, for the moſt part, the effects of theſe are only temporary. In ſlight affections, indeed, they ſometimes complete the cure, but in general we are under the neceſſity of employing aſtringents of a more powerful kind.

Among the firſt injections uſed in Gonorrhœa, mercury, in one form or another, was a conſtant ingredient. It was not, however, employed as an aſtringent; for at that period the uſe of aſtringents of any kind would have been conſidered as hazardous. Being applied in this manner directly to the ſeat of the diſeaſe, it was ſuppoſed that it might act as a ſpecific in the cure of it. But although I have given full and complete trials to injections of the mercurial kind, and in every variety of form, I have not, in any inſtance, found them to prove more effectual than other aſtringents. In order to aſcertain the point to which I allude, with as much certainty as poſſible, I have repeatedly made it the ſubject of experiment. Of different patients in Gonorrhœa, all nearly diſtreſſed with ſimilar ſymptoms, ſome have been made to employ a mixture of calomel with mucilage and water; others have uſed quickſilver diſſolved in mucilage, while ſome have at the ſame time been uſing injections in which mercury did not enter as an ingredient.

I admit that in moſt of theſe inſtances mercury proved ſerviceable, but by no means in ſuch a degree as many of the articles with which it was put, upon this comparative trial. There is no cauſe, therefore, to imagine that it acts as a ſpecific in the cure of clap.

To prevent interruption in this part of the work, formulæ will be given in the Appendix to this volume, of all the preparations I wiſh to recommend. Of mercurial aſtringent injections, the preſcriptions No. 1,

2, and 3, are perhaps the ſafeſt and beſt that can be uſed.

Calomel uſed in injections ſeems to act in a ſimilar manner with lapis calaminaris armenian bole, and other aſtringent earths; not by any ſpecific virtues with which they are endowed, but by reſtoring tone to parts weakened by the diſeaſe. It is in this manner, I conclude, that all of theſe articles act in the cure of Gonorrhœa; and in caſes that are not particularly obſtinate, they very commonly prove effectual. Lapis calaminaris, or tutia finely levigated, ſuſpended in thin mucilage, makes a very ſafe and uſeful injection. No. 4th and 5th are formulæ of theſe; and No. 6 is a preſcription of a gentleman retired from buſineſs, who, at one period, was in very extenſive practice in London, and who in the courſe of much experience in this particular branch, gave the preference to articles of this kind over all others that he ever employed.

Theſe earths poſſeſs one important advantage for this purpoſe: they never do harm, in whatever quantity they are uſed. If levigated with ſufficient care and attention, they may be uſed in any quantity that the liquid in which they are conveyed can be made to ſuſpend.

Allum diſſolved in water makes a ſafe and uſeful injection. It proves equally ſafe, and ſtill more powerful, when conjoined with a decoction of oak bark, or an infuſion of galls, for which preſcriptions are given No. 7th, 8th, and 9th.

Kino, an aſtringent lately much uſed in Diarrhœa, proves alſo an uſeful ingredient in injections for Gonorrhœa. I have in various caſes found it prove ſucceſsful where other articles had failed, and I have not obſerved that it ever does harm. As it is not very ſoluble in water it becomes neceſſary to ſuſpend it when in fine powder, by means of mucilage, as is preſcribed No. 10th and 11th.

Opium proves often an uſeful ingredient in injections of this kind; and as it is equally ſerviceable whether much pain takes place or not, I conclude that it

does not act so much as a sedative as it does as an astringent. No. 12th and 13th are formulæ of injections with opium.

Some of the astringent balsams, properly combined with water, make a good variety of injection for Gonorrhœa, particularly the balsamum canadense, and balsamum copaiba, as in No. 13th, and 14th.

Lead, in various forms, proves highly serviceable in these injections. Cerusse suspended in mucilage and water is often employed with advantage; but acetum lythargyri, and saccharum saturni dissolved in water are most to be depended on. Formulæ of these are given in No. 15th, 16th, and 17th.

Of all the astringent injections, however, which I have used, none prove so powerful as white vitriol dissolved in water. In the quantity of a grain and half to an ounce of water, it seldom creates much irritation, and it does not often fail in this variety of the disease, in which alone injections of any kind ever prove materially useful. No. 18th is the form of injection, which, in the common occurrences of daily practice, I am in the habit of using; and No. 19th is a combination of vitriol and acetum lythargyri, which, in a few cases, I have found to answer better than either of these articles seperately.

Many other astringents might be enumerated, from which very useful injections might be prepared, but the formulæ which I have given contain the most powerful of any with which we yet are acquainted. None of them will at all times prove successful; for even in this the most simple variety of the disease, the most active remedies will in some instances fail: but I can from experience in this branch of practice assert, that it will seldom happen where the injection is properly managed and duly persisted in.

The vitriolic injection, No. 19, I have mentioned as the most useful formulæ of any; but it will sometimes happen that a case will readily yield to others which has long resisted this. When we do not, therefore, soon succeed with one injection, we ought,

without loſs of time, to have recourſe to others, by which our purpoſe will be more eaſily accompliſhed than by continuing to employ the ſame for any length of time together.

In all theſe injections the different ingredients are in ſuch proportions as beſt ſuit the general courſe of buſineſs. This was a point of much importance to aſcertain, and ſo far as my obſervation goes, I have done ſo; but caſes will, no doubt, occur from time to time, in which ſome variety of ſtrength is neceſſary. All injections of this kind ſhould be of ſuch a ſtrength as to excite ſome degree of irritation in the urethra, but by no means ſo ſtrong as to create much pain: hence, where the preparations I have mentioned do not anſwer the purpoſe, they ſhould be made ſtronger; and when of ſuch a ſtrength as to excite ſevere pain, they ſhould be more diluted.

This, I may remark, is an object requiring much attention, for while it is obvious that injections muſt do harm when their ſtrength is more than it ought to be, it is equally certain that little or no advantage will be derived from them when they are too weak. I have known a cure accompliſhed in three days, merely by making an injection of a ſufficient ſtrength, where the diſeaſe had previouſly gone on for two or three months, from want of attention to this point. I conſider this, indeed, as one of the moſt important points in the treatment of Gonorrhœa, nor does any thing diſtinguiſh the practitioner of experience with ſuch certainty, as his being able to adapt the ſtrength of the injections which he employs to the particular circumſtances of every caſe which falls under his management.

In the application of injections there are two circumſtances which more particularly require attention, viz. the manner of throwing them up, and the frequency of uſing them.

They may be thrown up either with a ſmall bag of reſina elaſtica, fitted with a pipe, or with a common ſmall ſyringe: whether the bag or ſyringe be uſed,

the pipe ſhould be perfectly ſmooth, of a conical form, not above half an inch in length, and the cone of ſuch a thickneſs near to the root, as not to allow the pipe to paſs above a quarter of an inch into the urethra.

The bag or ſyringe being filled with the injection, and the patient ſeated with his breech over the ſide of a chair, ſo as to prevent the perineum from being preſſed upon, the pipe, when well oiled, ſhould be inſerted into the urethra, as far as it will go, with the right hand, while, with the left, he graſps the penis, and pulls it forward upon the pipe. He muſt now throw the injection up in ſuch a manner that it may reach the fartheſt part of the urethra that is affected, but not with ſuch force as to excite pain.

When the diſcharge proceeds from near the extremity of the penis, very little force is required for this purpoſe; but when the upper part of the urethra is affected, if the injection be not thrown up with ſome degree of firmneſs, it will not reach the ſeat of the diſeaſe, and hence no advantage will be derived from it. Previous, therefore, to the uſe of injections, the part of the urethra, whence the diſcharge proceeds, ſhould be aſcertained, and it can be eaſily done in the manner we have mentioned above.

In uſing injections it is judged proper by ſome to deſire the patient to prevent them from paſſing farther in the urethra than the ſeat of the diſeaſe; leſt, by forcing ſome of the matter along with the liquid, the infection ſhould be carried to parts which otherwiſe might not have been injured. For this purpoſe the patient muſt compreſs the urethra with the middle finger of his left hand, at that point to which it is meant the injection ſhould go; while the ſyringe or elaſtic bag is employed for throwing it up in the other. But although there is neceſſity for throwing injections farther than the ſeat of the diſeaſe, there is no cauſe for this anxiety in preventing them. It does not appear, that in this manner, the infection is ever communicated from one part of the urethra to another; at leaſt I have never met with an inſtance of it,

and I have ſeldom pointed out this to my patients as a neceſſary piece of attention. While it does not therefore, anſwer any good purpoſe, it certainly renders it more difficult for the patient to throw the injection properly up, as he cannot both make preſſure upon the upper part of the urethra, and, at the ſame time, manage the ſyringe with that exactneſs which it requires.

The point, however, of moſt importance in the uſe of injections is, the frequency with which they ſhould be thrown up; it is not enough that we diſcover a compoſition that will eſtabliſh a cure, if we do not uſe it with that frequency which the nature of the diſeaſe requires. In common practice the patient is deſired to inject the liquid two or three times a day: this, if the injection be of a proper ſtrength, will in courſe of time effect a cure; but I am perfectly convinced, from much attention to the ſubject, that cures would be much more ſpeedily obtained were injections to be more frequently thrown up. Inſtead of two or three times a day, I cauſe them to be uſed ſeven, eight, or ten times daily; by which the cure, inſtead of being protracted for ſeveral weeks, is often completed in as many days.

This, I muſt obſerve, is a point of ſuch importance in the cure of Gonorrhœa, that nothing can compenſate the neglect of it. The inefficacy of injections is frequently held forth as one material objection to them, but, for the moſt part, their failure will be found to depend, in a great meaſure, upon this circumſtance. Patients ought, therefore, to be urged to uſe them, at leaſt as frequently as I have mentioned. When indeed the diſcharge leſſens, or diſappears entirely, there is no neceſſity for uſing injections ſo frequently, but while it continues undiminiſhed, the more frequently the remedy is applied to the parts from whence it proceeds, the more quickly will it be removed.

On laying injections aſide, even after the running has diſappeared entirely, and when there is therefore

cauſe to ſuppoſe that a cure is obtained, the diſcharge often returns with equal ſeverity as at firſt, either from exceſs in wine, or over exertion in bodily exerciſe. In ſuch circumſtances the injections muſt again be employed, and uſed with as much frequency as before, care being taken not to leave them off till ſome time after the running has again diſappeared.

When the diſcharge returns repeatedly it is apt to weaken and relax the parts ſo much, that this alone comes at laſt to conſtitute a new diſeaſe, forming a variety of what in general is termed gleet. This, however, requires remedies of a different kind, and will fall to be conſidered in a different chapter.

It will be remarked that I have only ſlightly taken notice of any other remedies in treatment of Gonorrhœa: I have purpoſely done ſo, from full conviction of the inefficacy of all remedies that are not immediately applied to the urethra, and from finding that a proper uſe of injections never fails to prove ſucceſsful, where a cure by any means can be obtained.

Where much pain and inflammation takes place, I have obſerved above that ſome advantage may be obtained from blood-letting, and a ſtrict attention to an antiphlogiſtic regimen. I think it right, however, to ſay, that few caſes occur in which this becomes neceſſary. A patient under Gonorrhœa ſhould live moderately, but by no means upon ſuch low diet as in former times was preſcribed in ſuch caſes. He ought to live in ſuch a manner as may prevent the inflammatory ſymptoms from becoming ſevere, but not ſo low as to run any riſk of inducing relaxation or debility.

The circumſtances which moſt particularly require attention are, abſtinence from all manner of connection with women, and from bodily exertion, ſuch as much walking and riding on horſeback, which more eſpecially affects the parts concerned in this diſeaſe.

In the treatment of Gonorrhœa, where no injections are uſed, where the diſeaſe is either left entirely to nature, or treated with demulcents and purgatives,

a regular progreſs towards amendment is, for the moſt part, obſerved in the diſcharge. The matter from being thin, and of a greeniſh hue, or perhaps of a red colour from being tinged with blood, becomes of a thicker conſiſtence, tough, ropy, and of a white or yellow colour: but where injections are employed this ſeldom happens. This natural proceſs is thereby interrupted; and a cure often takes place without any change being perceived in the colour or conſiſtence of the diſcharge.

There are ſome ſymptoms which occaſionally take place in every ſtage of Gonorrhœa, and which, it might be expected, ought to have been more particularly noticed here, ſuch as chordee, and evacuation of blood from the urethra. But theſe ſymptoms being attended with circumſtances requiring a peculiarity of treatment, quite unapplicable in the ordinary ſtate of Gonorrhœa, and being all of them highly important in their nature, a ſeparate ſection will be allotted for the conſideration of each of them. We ſhall now, therefore, proceed to conſider the ſecond ſtage of the diſeaſe.

SECT. V.

Of the Second Stage of Gonorrhœa.

IN this ſtage of the diſeaſe all the ſymptoms are more violent than in the firſt. The heat of urine is much more ſevere; the whole body of the penis becomes tender, and even painful; and chordee takes place to a very diſtreſsful degree. The matter diſcharged from the urethra is either of an ugly green colour, or deeply tinged with blood, and commonly very fœtid. It is found, on examination, to proceed from the more ſuperior parts of the urethra, generally from about the middle of the perineum, where the patient complains of a ſmart pain upon preſſure, and

where one or more ſmall tumors are often perceptible, produced by the inflammation having extended to Cowper's glands.

Although the ſymptoms of the firſt ſtage of Gonorrhœa are commonly very diſtinctly marked, yet they frequently proceed to, and terminate in one of the other ſtages of the diſeaſe, particularly in this which we are now conſidering. This happens from the inflammation extending along the urethra, either from the matter producing the diſeaſe being more than uſually acrimonious; from the effect of improper management on the part of the patient; from the imprudent uſe of irritating or very aſtringent injections; or from the patient being of a habit of body rendering him particularly liable to be acted upon by cauſes apt to excite inflammation.

I conclude that it happens moſt frequently from the firſt and laſt of theſe cauſes, or, perhaps, from a combination of them both; as in a great proportion of caſes of this ſecond ſtate of the diſeaſe we find it taking place almoſt from the firſt day on which the running appeared. It muſt, no doubt, have fallen under the obſervation of every practitioner that this, as well as the third and fourth ſtages of Gonorrhœa, are often induced by the patient living in a ſtate of riot and debauchery, and, in ſome caſes, by the immoderate uſe of irritating injections. But although theſe are circumſtances which in every caſe of Gonorrhœa ought to be rigidly guarded againſt, from their tending to excite one of the moſt diſtreſsful complaints to which the human ſpecies is liable; yet I am convinced, from what has been mentioned, that the worſt ſtates of the diſeaſe will frequently occur, notwithſtanding of all that can be done either on the part of the patient or ſurgeon to prevent them.

As the practice in this ſtate of Gonorrhœa is materially different from what we have recommended in the firſt ſtage of it, the utmoſt attention becomes neceſſary in diſtinguiſhing between them. In the firſt, the matter is, for the moſt part, diſcharged from

within an inch and half of the extremity of the penis; and where the diſeaſe does not extend farther up the urethra, although the ardor urinæ is ſometimes conſiderable, yet the pain is never ſo ſevere as that which ariſes from the inflammation in the ſecond ſtage of the diſeaſe. In this laſt, the whole body of the penis, as we have obſerved above, is tender and painful; the chordee which takes place is highly diſtreſsful, and one or more inequalities, accompanied with pain on preſſure, are diſcovered in the perineum: whereas, in the former, any chordee which occurs is for the moſt part very moderate. The pain is conſiderable at all times when the patient is not paſſing water, and no hardneſs or inequalities are perceived in the perineum.

It is proper to remark, that even in the ſecond ſtage of the diſeaſe, theſe glandular tumefactions in the perineum are not always at firſt obvious; but upon preſſure with the fingers they are eaſily diſcovered, even on their firſt commencement; and in the more advanced ſtages of the diſeaſe they become perceptible, both to the touch and to the eye. Whenever chordee occurs in a ſevere degree, the whole penis acquires a firmneſs and tenſion, particularly where it runs along the perineum. This, however, is very different from the glandular affections to which I allude: the one is a diffuſed ſwelling, extending over the whole, or a conſiderable part of the penis; it does not continue fixed or permanent, and ſeems to depend upon a morbid irritability in the muſcles of the penis, by which they are eaſily excited to violent and unequal contractions. The others are, at firſt, ſmall, circumſcribed ſwellings, painful to the touch, which do not riſe and fall ſpeedily, and which remain more or leſs permanent according as the ſymptoms with which they are connected are more or leſs violent.

Theſe ſwellings proceed, as I have already obſerved, from an inflamed ſtate of Cowper's glands, induced by the inflammation extending along their ducts, which terminate in the urethra, to the glands themſelves.

Inflammation here, when it comes to a height, in a manner similar to what enſues from it in other parts, is very apt to terminate in ſuppuration; and as the formation of matter in the ſubſtance of theſe glands is apt to excite the moſt diſtreſsful conſequences, nothing ſhould be omitted that can tend to prevent it. When matter forms in them, if it be not immediately diſcharged by an external opening, it is very apt to burſt into the urethra, and to produce runnings, which, in ſome caſes, do not terminate but with the life of the patient.

On the firſt approach, therefore, of this ſecond ſtage of Gonorrhœa, all our endeavours ſhould be employed to remove or leſſen the inflammation. If the patient is plethoric he ſhould loſe a conſiderable quantity of blood with the lancet, and ten or a dozen leeches ſhould be applied to the pained part. Whatever his habit of body may be, the application of leeches ſhould not be omitted, and they ought to be repeated once and again, according to their effects, and to the degree of inflammation and ſwelling which take place; ſaturnine poultices ſhould be applied over the part affected, the bowels ſhould be kept open with gentle laxatives, and the patient ſhould be put upon a low, cooling diet.

If, either by the violence of the inflammation, or by an imprudent uſe of aſtringent injections, a ſtop has been put to the diſcharge, much advantage will be derived from our ſoliciting a return of it. This however, muſt not be done with applications of an irritating nature, ſuch as bougies, and ſtimulating injections, as ſome have adviſed, but it may be attempted with ſafety by throwing up, from time to time, injections of warm oil and other emollients, ſuch as warm decoctions of lintſeed and althea.

But although we find from experience that much harm is done by the application of ſtimulants directly to the urethra, we know that they may be applied to the ſkin both with ſafety and advantage. Thus, when the ſwelling does not ſoon leſſen, by bloodlet-

ting and the other remedies mentioned above, I have, in different inſtances, derived advantage from the application of bliſters to the parts affected, and by covering the bites of the leeches with adheſive plaſter; this practice may be adopted even the day after they have been applied. The bliſter ſhould be made to cover the whole perineum.

When the remedies we have adviſed are timeouſly and properly applied they will not often fail to remove the inflammation; but when this is not accompliſhed, and when the ſwelling or ſwellings proceed to a ſtate of ſuppuration, nature ſhould be as much as poſſible aſſiſted by a frequent and free uſe of emollient poultices and fomentations, and as ſoon as a fluctuation of matter is diſcovered, it ought to be diſcharged by an opening made the full length of the tumor. In this manner a ſore will be produced that will be difficult to heal; but if the habit of body be ſound, a cure will be obtained at laſt, and there is no other method with which I am acquainted that will ſo readily prevent the matter from burſting into the urethra.

When this unfortunate circumſtance takes place, of matter collected in one or more of theſe glands, finding acceſs to the urethra, ſcarcely any advantage is to be derived from art in the treatment of it. Injections, as we remarked in the laſt ſection, inſtead of proving ſerviceable, rather do harm. They cannot reach the cavity of the gland, where alone they might prove uſeful, and by preventing for a time that free diſcharge of matter, which, in every abſceſs is deſirable, they cauſe it to collect, and alternately burſt, out, in greater quantities than before.

When the cauſe of ſuch an occurrence is not ſuſpected, both the patient and practitioner are apt to imagine that it proceeds from the fault of the injection: every variety of the remedy is therefore employed, but nearly the ſame effect reſults from all of them, and the patient, after being teaſed and perplexed for a great length of time, finds himſelf in no degree better than he was at firſt.

By ſome practitioners a courſe of mercury has been adviſed in this ſtate of the diſeaſe, and particularly frictions with mercurial ointment on the perineum; but although I have often ſeen the practice fairly and completely tried, I never knew any advantage derived from it. Neither does mercury prove uſeful in the ſores which enſue from opening abſceſſes in the perineum, proceeding from Gonorrhœa. On the idea of theſe ſores being of the ſame nature with ſuch as ſucceed to buboes in Lues Venerea, mercury is commonly preſcribed; but although I have known it repeatedly uſed, not only for the cure of theſe ſores, but for the diſcuſſion of the previous tumefaction of the glands, I never knew any evident benefit derived from it.

All that in ſuch circumſtances can with propriety be done is, to cauſe the patient to live in ſuch a manner as will moſt effectually brace his conſtitution; his diet ought to be of a nouriſhing kind; cold bathing, particularly in the ſea, proves ſometimes uſeful, and, in ſome inſtances, Jeſuit's bark, in large quantities, is given with advantage.

In no period of this ſtate of Gonorrhœa are injections admiſſible, and I ſuſpect that the diſcredit into which they have fallen with many is owing to their being employed promiſcuouſly in every ſtate of the complaint. We have juſt ſeen that they cannot be uſed with any proſpect of ſucceſs, when ſuppuration has actually taken place, and a very little attention will make it appear that they ought not to be adviſed during the inflammatory ſtate of the complaint. While the parts are inflamed, inſtead of endeavouring to remove the diſcharge, we ought rather to try to promote it. Nothing tends with ſuch certainty to moderate all the ſymptoms; and I have repeatedly obſerved that they are all rendered much more ſevere by whatever tends, in any degree, to give a check to the running. It is proper, therefore, that the younger part of the profeſſion be put ſtrictly on their guard againſt the uſe of injections in every period of this ſtage of Gonorrhœa; a practice which, in the firſt

ſtage of the diſeaſe, is the only remedy, as we have ſeen, upon which any dependence ought to be placed, but which in this is evidently fraught with danger to the patient, and therefore with diſcredit to thoſe who adviſe it.

Beſides the glandular abſceſſes of theſe parts, which we have juſt deſcribed, collections of matter are apt to occur in this ſtate of the diſeaſe, not only in the cellular ſubſtance of the perineum, but in the corpus cavernoſum of the penis, as well as in the corpus ſpongeoſum urethra. The treatment of theſe, however, ought to be ſo exactly what we have pointed out for the others, that nothing farther need be ſaid upon it. To prevent, as much as poſſible, the riſk of ſuch collections burſting into the urethra, the matter ſhould be diſcharged by a free opening the whole length of the tumor, as ſoon as it is found to be completely formed.

When collections of matter in theſe parts, whether ſeated in Cowper's glands, or in the contiguous ſoft parts, terminate, as they ſometimes do, in external openings, at the ſame time that a communication is formed with the urethra, the urine eſcapes at the ſore, and thus another diſeaſe is produced, termed a ſinus, or fiſtula in perineo. This falls to be treated like ſinuſes in every other part: the ſeat of the abſceſs muſt be laid open from one end to the other, and by enlarging the opening in the urethra, if the patient be otherwiſe in ſound health, a cure will, for the moſt part, be obtained, by endeavouring to heal the ſore from the bottom in the uſual way *.

It may be alledged, if this proves ſucceſsful where the matter has already formed an opening, both inwardly and outwardly, for itſelf, that a ſimilar practice ſhould be adopted where the abſceſs has only burſt into the urethra. That a free inciſion ſhould be made into it, and a cure attempted in the manner we have already adviſed.

* V. Syſtem of Surgery, chap. xv.

Where the opening into the urethra is such as to admit the urine to pass into the abscess, the practice to which I allude ought undoubtedly to be adopted, for no other will prove successful, and the patient must remain in a state of great distress and misery while this continues; but while the external teguments remain entire, and while the urine does not find access to the abscess, no attempt of this kind ought to be made. However inconvenient the discharge of matter from the urethra may be, and however long it may continue, the patient ought rather to submit to it than to the uncertain event of a fistulous opening, which always proves tedious and distressful, with whatever judgment the disease may be afterwards treated.

SECT. VI.

Of the Third Stage of Gonorrhœa Virulenta.

IN this stage of Gonorrhœa, along with ardor urinæ, and the other ordinary symptoms of the disease, the patient complains of a severe fixed pain in the upper part of the perineum, accompanied with a sensation of fulness, and tension in all the parts contiguous to the anus. The desire to void urine is more frequent than in either of the two preceding states, and it is commonly passed with much pain and difficulty; often drop by drop. Tenesmus, or a painful and frequent desire to go to stool, often takes place, and, in some instances, to such a distressful height, as adds greatly to the misery of the patient.

Even in the commencement of the disease the pain in making water is in some cases so severe as to excite heat and other symptoms of fever; and, in the more advanced stages of it, I have known the fever rise to a very alarming height. This state of Gonorrhœa, in some instances, proceeds from the inflammation spread-

ing backward in a ſlow, gradual manner, from the point of the penis, which we have ſhewn to be the ſeat of the firſt ſtage of the diſeaſe, but more frequently it takes place ſuddenly either from the imprudent uſe of injections, from the patient being in a riotous courſe of life, or from his being expoſed to violent exerciſe, either on foot or on horſeback.

On examining the parts affected, the penis is, for the moſt part, in a ſtate of tenderneſs and irritability, nearly, indeed, as we have deſcribed it to be in the ſecond ſtage of this diſorder; but, together with this, on compreſſing the parts about the end of the rectum a ſenſe of pain ariſes, which is never experienced in either of the ſtates already deſcribed, and on introducing the finger into the anus, the proſtate gland is found conſiderably ſwelled, and in ſuch a ſtate of irritability that it can ſcarcely bear to be touched.

Even the ſlighteſt degree of this affection excites much uneaſineſs, and the deſire to paſs water ſeldom ceaſes for above a few minutes together; but when the diſeaſe has been of long duration, the proſtate gland, which nearly ſurrounds the urethra, or which rather appears, as it were, to form the paſſage of urine at this part, becomes often ſo much ſwelled as nearly to obſtruct the diſcharge of urine as completely as when the urethra is entirely ſtopped. Thoſe, indeed, not verſant in this branch of practice are apt to miſtake this affection for ſtrictures in the urethra; of courſe a delay takes place in uſing the proper remedies, and attempts which are frequently made to overcome the ſuppoſed ſtrictures, too often do miſchief. Frequently, indeed, neither a bougie, nor catheter, when employed for removing a ſuppreſſion of urine, proceeding from this cauſe, can be paſſed; for the gland is in ſome caſes ſo much ſwelled as to obliterate the paſſage almoſt entirely, and in others, by ſwelling on one ſide only, the paſſage is thrown altogether over to the other; circumſtances which render the introduction of a bougie either impracticable, or at beſt difficult and uncertain.

As it is in the commencement only of this affection that any material advantage is derived from the interference of art, and as it is a diſeaſe which, in the more advanced ſtates of it excites the greateſt poſſible diſtreſs, we ought inſtantly on the firſt approach of it, to apply ſuch remedies as experience has proved to be the moſt effectual in removing it.

Of all the remedies that I have ever employed, early blood-letting is almoſt the only one from which any obvious advantage has been derived. It ought to be adviſed immediately on the firſt approach of pain, nor ſhould we be deterred by a weakly or delicate conſtitution. In a perſon of this deſcription the evacuation ought, no doubt, to be more ſparingly adminiſtered than where plethora takes place; but even in the moſt delicate habit of body, a quantity of blood ſhould be diſcharged in proportion to the ſtrength of the patient, in the firſt place by the lancet, and afterwards by leeches applied to the parts affected. The practice of blood-letting I conſider to be equally neceſſary here as in caſes of pleuriſy: in the latter, indeed, the life of the patient is in greater hazard, but in this his future comfort and enjoyment of life are at ſtake. It ought not, therefore, in any inſtance, to be omitted.

I ſpeak the more decidedly upon this from various inſtances having fallen within my own obſervation, of the moſt diſtreſsful conſequences taking place from this remedy having been omitted, and from many others having ended eaſily where it was employed with freedom. It is in the firſt ſtages only of the diſorder, however, in which it acts with much advantage; chiefly, indeed, on the firſt ſymptoms of inflammation taking place, for when the proſtate gland becomes ſwelled and inflamed in any conſiderable degree, neither this nor any other remedy can be depended upon for removing it. After a long courſe of time an enlarged proſtate will ſometimes be found much diminiſhed, but this happens more frequently without our being able to account for it, than as a

neceſſary conſequence of any medicine employed for it.

Bliſters do not afford that relief here that we ſometimes derive from them in ſwellings of Cowper's glands, neither is much advantage ever obtained from ſaturnine applications. Opium, whether given by the mouth, or in clyſters, proves more uſeful than any other remedy for removing the pain and leſſening the irritation; but probably from coming more directly into contact with the diſeaſed parts, it proves evidently moſt ſucceſsful when given in clyſters, and it ſeems to anſwer better in ſmall doſes, frequently repeated, than in large quantities given at once. Thirty drops of laudanum, mixed with two ounces of thin ſtarch, and thrown eaſily into the rectum, very commonly gives immediate relief, and as long as this doſe proves effectual it ought not to be increaſed.

While opiates, given in this manner, leſſen the irritability of the organs of urine, they alſo give much relief by removing that painful and frequent deſire to go to ſtool, with which patients in this diſeaſe are often afflicted.

Hitherto I have ſaid nothing of the uſe of injections, which are frequently employed in this, as in other ſtages of Gonorrhœa, for removing the running. This, however, is a practice that ought by no means to be adopted. It has at firſt been gone into without reflecting upon its tendency, and afterwards perſiſted in merely from having once been adopted. In the ſecond ſtage of Gonorrhœa I had occaſion to remark that the diſcharge, inſtead of being ſtopped, ought rather to be encouraged. The ſame obſervation applies ſtill more forcibly here, where a ſtoppage of the running tends always to aggravate every ſymptom, and where we find conſiderable relief often obtained by our bringing on a return of it. This, as we obſerved in the laſt ſection, ſhould rather be done by the uſe of warm emollient injections, than by ſuch as ſtimulate and give pain. Theſe, I know, are adviſed for this purpoſe, but as I have known them evidently do much

harm, even when managed in the moſt cautious manner, and as we find, indeed, that the diſeaſe is often at firſt induced by this very practice, I do not heſitate to ſay that it ought very univerſally to be laid aſide. For a ſimilar reaſon bougies ought never to be employed here.

Emollient injections prove uſeful not merely by ſoliciting a more plentiful diſcharge from the urethra, but by ſoothing the irritability in the parts affected, and thus leſſening the pain; and where opiates are conjoined with them they act ſtill more powerfully in this manner. An infuſion of the heads of poppies and althea root, uſed warm, anſwers particularly well for this purpoſe. Warm poultices, applied externally over the fundament and perineum, alſo prove uſeful. Some advantage too is derived from warm fomentations; and I have known the warm bath afford much relief.

All theſe remedies, however, act as palliatives only; but by their uſe the preſent diſtreſs may be much mitigated, while nature, in the courſe of time, aided by cautious management on the part of the patient, may at laſt accompliſh a cure. At leaſt, this, in the courſe of my obſervation, has happened in ſeveral inſtances where the ſwelling of this gland has not arrived at any great height; but it has been more frequently the conſequence of rigid attention to regimen than the effect of medicines. We conſtantly find, in this complaint, that whatever excites much heat of body does harm; whether bodily exerciſe, or heating food and drink; hence every thing of this kind ſhould be avoided, particularly much walking and riding on horſeback; and full meals of animal food, eſpecially when wine or other ſtrong drinks are likewiſe indulged in. The diet ſhould conſiſt of milk and vegetables, with no greater proportion of animal food than is neceſſary to ſupport the ſtrength of the patient.

Such drinks ſhould be chiefly uſed as tend to blunt the acrimony of the urine, and to ſheath the parts which it paſſes over; ſuch as infuſion of lintſeed and althea,

emulsions of almonds, and water in which gum arabic is dissolved.

I have insinuated that I have little confidence in the activity of any medicine for removing swellings in the prostate gland, when it has unfortunately acquired a considerable bulk. A deference to the opinion of others requires that I should state the grounds upon which this opinion is formed; this I shall do in noticing shortly the medicines which have been employed with the view of obviating this complaint.

When other remedies fail, and in some cases even before they are fairly tried, mercury is, in ordinary practice, recommended; but I have much reason to think that it very commonly, if not always, does harm.

Even in early practice I had frequent opportunities of seeing this complaint, and being led by conversation with others to expect substantial relief from mercury, I used it freely for several years: I must acknowledge, however, that I never perceived any advantage arise from it, while, in some cases, evident mischief was the effect of the practice.

Mercury never had any obvious effect in diminishing the tumour, and by encreasing the irritability of the system; even when given in small quantities, and in the most cautious manner, it usually rendered the parts affected more painful than they were before. On these accounts mercury appears to be not only an useless but a dangerous remedy, so that I have now, in swellings of this gland, laid it entirely aside.

Cicuta has also been much recommended in swellings of this gland; but although I have given it very full and complete trials, I am not sure that in any instance it ever proved useful. The disease, in some, has appeared to yield while cicuta was employed, but this was only where a great length of time had elapsed, and not in a greater proportion of cases than where this remedy was never used. But as it may be employed under proper management without any risk to the patient, where other remedies do not succeed, and where it is necessary to be doing something, it may be

proper to give it a farther trial before any final opinion is formed of it.

Having, in tumours of other parts, obſerved obvious advantages from a decoction of the root of mezereon, I have, in various inſtances, uſed it in ſwellings of the proſtate gland. In ſome it has appeared to prove uſeful, but never ſo evidently as to enable me to ſpeak with certainty about it. When conjoined with a ſarſaparilla*, it ſeems, in other caſes, to be rendered ſtill more active, and the mucilage contained in that root, by blunting the acrimony of the mezereon, renders it both more agreeable to the palate and more grateful to the ſtomach.

Among other remedies employed in ſwellings of the proſtate gland, ſea bathing and drinking ſea water has been one of the moſt frequent. Where this diſeaſe is connected with a ſcrophulous conſtitution this remedy certainly proves uſeful. It will never remove the tumour ſpeedily; but, by ſtrengthening the conſtitution, it ſeems, in ſuch circumſtances, to render the ſwelling leſs permanent than it uſually proves to be where this remedy is not employed. It ought, however, to be remarked, that all ſtrong purgatives do much harm. This happens in every ſtage of Gonorrhœa, but eſpecially where the proſtate gland or bladder are affected. By the irritation which they excite they not only induce a more copious diſcharge, but render the inclination to void urine much more frequent and more painful. When ſalt water is uſed, therefore, it ought not to be in greater quantities than will anſwer as very gentle laxatives.

Swelling of the proſtate gland does not terminate as tumours in the other glands of the urethra frequently do, in ſuppuration. When Cowper's glands, or any of the ſmaller glands of the urethra become inflamed, they either ſuppurate or a cure is obtained by diſcuſſion: but, in ſimilar affections of the proſtate this very ſeldom happens. When the tumour does

* Vide Appendix, No. 45.

not yield to timeous blood-letting, or when it does not afterwards gradually ſubſide, it either remains nearly of the ſame ſize and hardneſs, or becomes both larger and firmer till it ends in a real ſchirrus, of conſiderable magnitude.

In this ſtate of the diſeaſe the diſcharge is, for the moſt part, thin and acrid; together with matter from the contiguous parts of the urethra, which are uſually more or leſs diſeaſed, a conſiderable quantity is thrown out of the gland itſelf, forming, as we will afterwards ſee, one of the moſt obſtinate varieties of gleet.

Even in the commencement of this affection of the proſtate, the paſſage of urine, as we have already remarked, is often much obſtructed; but, in the more advanced ſtages of it, this, in ſome caſes, comes to ſuch a height as to be unſurmountable. Whether from the paſſage being completely obliterated by the ſides of the ſwelled gland adhering together, which is alledged to happen, but which I never ſaw, or from the paſſage being contracted by the ſides of the gland ſwelling unequally, it ſometimes happens that neither a bougie nor catheter can be introduced. In this caſe, as a total obſtruction is formed to the paſſage of urine, we are obliged to draw it off by puncturing the bladder, which may either be done above the pubes, or by paſſing the trocar into the bladder from the rectum, or puſhing it up by the ſide of the diſeaſedg land*. It muſt be remarked, however, in forming an opening with a trocar for drawing the urine off from the bladder, that a very enlarged ſtate of this gland precludes every attempt for this purpoſe either in the perineum or rectum. In which caſe it muſt neceſſarily be done above the pubes.

In ſuch circumſtances, all that art can do, is to preſerve a paſſage for the urine, by retaining a canula in the opening, and keeping the patient as free from pain as poſſible with doſes of opium adequate to the diſtreſs in which he happens to be.

* Vide Syſtem of Surgery, chapter xiii.

SECT. VII.

Of the Fourth Stage of Gonorrhœa.

IT ſometimes happens that the inflammatory ſymptoms paſs eaſily over the anterior part of the urethra, and ſhew themſelves in more force and violence higher in the paſſage. Thus, although the third ſtage of the diſeaſe, in which, as we have ſeen, the proſtate gland is chiefly affected, is ſometimes produced by the inflammation ſpreading from thoſe parts which are only concerned when the ſecond ſtage of it takes place, yet inſtances often occur of the inflammation paſſing from the point of the urethra along the whole courſe of the paſſage, without any intermediate part of it being much affected, and fixing in the moſt violent manner, upon the proſtate gland or bladder. In ſome caſes the proſtate is affected while the bladder itſelf remains ſound, while in others it paſſes eaſily over that gland, and ſeizes with much violence upon every part of the bladder.

In ſome caſes the bladder becomes affected almoſt on the firſt attack of the diſeaſe. The inflammation ſpreads ſo quickly along the urethra that the bladder is pained in the courſe of a few hours from the commencement of the diſcharge. It more frequently occurs, however, after the running has been of ſome duration, and, for the moſt part, can be traced as the conſequence of much expoſure to cold and dampneſs; of violent exertion in walking or on horſeback, or, as the effect of an injection thrown with too much violence into the upper part of the urethra.

The patient, from the firſt approach of the diſeaſe, complains of much uneaſineſs, which at laſt terminates in ſevere pain over all the region of the bladder, particularly about the neck of it; accompanied with a frequent and painful deſire to make water, and of-

ten with teneſmus. In ſome caſes the pain is chiefly ſeated about the anus, but, in general, all the under parts of the abdomen, particularly about the region of the pubes, are greatly pained, and in ſome inſtances, even the kidneys become affected, either from nervous ſympathy, or from the inflammation ſpreading from the bladder along the ureters.

In general the pain, eſpecially after voiding urine, extends to the glans penis, and as this, with the ſtoppage which occurs to the flow of urine, are ſymptoms which always accompany ſtone, caſes of this kind, when the hiſtory of the diſeaſe has been concealed, has been miſtaken for ſtone in the bladder.

If the running from the urethra has not been ſtopped by injections, it continues as if no affection of the bladder had occurred; and in general any interruption that takes place to the diſcharge proves only temporary; but along with the uſual running from the urethra, ſuch as takes place in one or other of the different ſtages which we have deſcribed, a conſiderable quantity of matter paſſes off with the urine. This gives the urine a turbid appearance, as if purulent matter was mixed with it, but on examining the depoſition, which is uſually made in the courſe of a few hours, it is found to conſiſt almoſt entirely of mucus.

On a further continuance of the diſeaſe this matter contained in the urine aſſumes a very different appearance. Inſtead being broken and divided into flakes, as at firſt, it now becomes tough and viſcid, in a very remarkable degree, reſembling iſinglaſs diluted with water to the conſiſtence of jelly. This geletaneous matter is ſuſpended in the urine when firſt voided, but it ſoon ſeparates, and falls to the bottom, where it adheres ſo firmly to the ſides of the veſſel in which it is received, as to be ſeparated from it with difficulty. In ſome caſes this ſubſtance is clear and tranſparent, but, for the moſt part, it is tinged of a yellow hue, and ſomewhat opake.

When any conſiderable quantity of this matter has

paſſed off the patient is commonly relieved, and continues eaſy for a longer or ſhorter period, according to the degree of inflammation that takes place.

In ſome caſes the quantity of this viſcid matter is very inconſiderable, being no more than what ſlightly covers the bottom of the pot, while in others it ſeems to form more than half of all that comes from the bladder. When in ſuch conſiderable quantities, it tends greatly to reduce the ſtrength of the patient, inſomuch that few conſtitutions are able to bear it long.

From the nature of the parts in which this diſeaſe is ſeated, we would expect that it ſhould be the moſt formidable complaint that Gonorrhœa could induce; but this is by no means the caſe: the diſeaſe deſcribed in the laſt ſection, viz. ſwelling of the proſtate gland, proves always more ſo. Few recover from the one, while cures are obtained by a great proportion of all who are ſeized with the other. At leaſt in healthy conſtitutions this commonly happens, if the diſeaſe has not been much neglected at firſt. In general, indeed, a conſiderable time paſſes over before a perfect cure is obtained; nay, ſome degree of uneaſineſs, and certain deranged ſenſations, will often continue for a number of years, but after the firſt violence of the ſymptoms is over, they generally become, in a gradual manner milder, till at laſt they vaniſh entirely.

On the firſt approach of the diſeaſe blood-letting is the only remedy upon which moſt dependence ought to be placed, and, when freely practiſed, it ſeldom fails to render the ſymptoms moderate, and of ſhorter duration than they otherwiſe probably would be.

A quantity of blood ſhould be taken with the lancet in proportion to the ſtrength of the patient, a number of leeches ſhould be repeatedly applied to the neighbourhood of the anus. With reſpect to diet, and other circumſtances, the patient ought to be treated in the manner we have adviſed in the laſt ſection. His bowels ſhould be kept moderately open with caſtor oil, or other gentle laxatives, and opiates

ſhould be exhibited in ſufficient doſes for leſſening, or even for removing the pain. When treating of ſwelling of the proſtate gland we adviſed opiates to be given in the form of clyſters, rather than by the mouth, and this mode of exhibiting the remedy proves equally uſeful here.

With a view more certainly to allay the irritability of the bladder, it has been propoſed to inject opium diſſolved in water into it: but this appears to be a dangerous experiment. I have known it done, but the patient was nearly killed by it. Convulſions and other alarming ſymptoms occurred, but not in ſuch degree as to prove fatal.

Warm emollient injections, ſuch as warm oil, or the form of injection in the Appendix, No. 23, frequently give relief from pain, and give a temporary ſuſpenſion of that conſtant deſire to paſs water which often prevails here; and in ſome caſes the ſemicupium proves ſucceſsful when theſe have failed.

A plentiful uſe of mucilagenous drink, ſuch as infuſion of lintſeed and althea root, and a ſolution of gum arabic in water, afford relief in all affections of the urinary paſſages, but in none more than in the one of which we are now treating.

All theſe remedies are meant to alleviate pain and irritation in the commencement of the diſeaſe, and when timeouſly applied, and duly perſiſted in, they very commonly prove effectual, but in the more advanced ſtages of the diſeaſe, when the pain is not ſo ſevere, but when a good deal of uneaſineſs continues, accompanied with a diſcharge of that viſcid matter which we have deſcribed, remedies of this kind do not afford ſo much relief. Opiates will no doubt tend at all times to allay irritation, by blood-letting, which at firſt never fails to give relief, tends now only to weaken the patient, without being productive of any advantage.

In this ſituation Jeſuit's bark ſometimes proves uſeful; and I have ſeen inſtances where a few grains of allum added to each doſe, ſeemed to render it more ef-

fectual. Balſam of copaiba, and Canada balſam, prove likewiſe uſeful here: but where much benefit is expected from them they ſhould be given in as large doſes as the ſtomach of the patient will permit.

Of all the remedies, however, which in ſuch circumſtances I have ever tried, uva urſi is the moſt effectual. No advantage is derived from it where the proſtate gland is diſeaſed; but in unmixed affections of this kind, where the bladder only is affected, it ſeldom fails to procure relief. It may be given to the extent of a ſcruple at firſt, and afterwards half a drachm of the powder three times a day, in which quantity it ſeldom fails, in the courſe of a few days, to leſſen the proportion of viſcid matter in the urine; by which, and the abatement of pain which at the ſame time takes place, we are always certain that the inflammation alſo is diminiſhed.

On the idea that this affection of the bladder proceeds from a tranſlation of the matter of Lues Venerea from the urethra, mercury is commonly uſed in it; but although I have often given it, I never knew any advantage derived from it; it ſometimes even does harm. It increaſes the irritability of the ſyſtem in general, as well as of the parts more particularly affected.

When affections of this kind have continued long, the bladder is apt to become much thickened and leſſened in diameter: hence, even after all the other ſymptoms are gone, the frequent inclination to paſs urine continues. In ſome caſes this goes on for years: nay, I have known it endure for a great length of time, and only terminate with the life of the patient. It ſeems evidently to be the effect of inflammation, for it ſucceeds to inflammation of the bladder, by whatever cauſe it may be induced. It alſo occurs from ſtrictures in the urethra, when they happen to be conſiderable and of long duration.

For the removal of this thickened ſtate of the coats of the bladder mercury is often preſcribed, and in ſome caſes it has certainly proved uſeful; but it

ſeems to prove equally ſo from whatever cauſe the diſeaſe may at firſt have ariſen*.

SECT. VIII.

Of Chordee.

CHORDEE is a painful, involuntary erection of the penis. Patients in every ſtage of Gonorrhœa are, in ſome degree, liable to Chordee; but it occurs much more frequently, and to a much greater height in the ſecond ſtage of the diſeaſe, than in any of the others. It happens at all times of the day, but moſt frequently when the patient is warm in bed, when it is in ſome inſtances ſo ſevere as to deprive him entirely of reſt. During a fit of Chordee the penis becomes hard and painful to the touch, and for the moſt part it is curved downwards in a conſiderable degree.

Chordee occurs in every period of this ſtage of Gonorrhœa, and it ſometimes remains after the heat of urine and all the other ſymptoms are gone, but it is uſually moſt ſevere during the continuance of the inflammation, and becomes more or leſs ſo according as that ſymptom is in a greater or leſſer degree.

I therefore conclude that Chordee is an effect of inflammation, and that it proceeds from irritation, communicated from the nerves of the urethra to thoſe of the contiguous muſcles, by which thoſe unequal degrees of contradiction are produced over the whole ſubſtance of the penis, which univerſally take place in this diſeaſe.

Were it owing to effuſions of lymph into the re-

* This practice of giving mercury in the thickened ſtate of the urinary bladder which ſucceeds to inflammation, we find recommended by the late Doctor Ebenezer Gilchriſt of Dumfries, to whom we are indebted for much valuable information in different parts of the practice of medicine.

ticular parts of the penis, as ſome have imagined to be frequently the caſe*, Chordèe would be of a more permanent nature than we ever find it to be, and theſe effuſions would be apt to terminate in ſuppuration. Now, althouh ſuppuration is ſometimes the conſequence of inflammatory tumours in theſe parts, I have never obſerved that it happens in thoſe tumefactions which accompany Chordee. The latter commonly riſe and diſappear again in the courſe of a few hours, and they are more diffuſed than tumours uſually are which proceed to ſuppuration. The others riſe more ſlowly, and they terminate, whether by diſperſion or ſuppuration, in a much more gradual manner.

Of all the remedies I have ever employed opiates prove moſt uſeful in Chordee. The pain and tenſion are ſometimes removed by rubbing the parts affected with laudanum, or with a ſtrong ſolution of opium in water, and by keeping pledgits immerſed in either of theſe, conſtantly applied to them; but the greateſt advantage is obtained from the internal exhibition of opium. Thirty or forty drops of laudanum, given at bed-time, or on the acceſſion of the Chordee, very ſeldom fails in preventing or removing it.

Emollient injections thrown up the urethra, particularly when impregnated with opium, have alſo a powerful influence in leſtening the violence of Chordee; and as the heat and irritation produced by coſtiveneſs tends greatly to augment the violence of this ſymtom, I have known much advantage obtained from the operation of a gentle laxative.

A temporary relief is often derived from the application of a cold ſolution of ſaccharum ſaturni and I have known the external application of camphor prove ſerviceable: when diſſolved in ſpirit of wine it proves uſeful, but it acts with more advantage when diſſolved in oil. Frictions with mercurial ointment have been much recommended for the removal of Chordee, but as I have commonly found more ad-

* V. John Hunter on the Venereal Diſeaſe.

vantage from rubbing with camphorated oil, I conclude that it is chiefly the emollient properties of the mercurial ointment which render it uſeful, and, therefore, that the inconveniencies which ſometimes occur from mercury, may here be avoided.

In ſome caſes we derive advantage from tying the penis down with a fillet to the thigh, but it only anſwers in very ſlight affections, and the practice ought never to be adviſed in the more ſevere attacks of the diſeaſe. Being an obvious remedy for counteracting an erection, it is not unfrequently employed in the firſt inſtance by the patient; but I have frequently known it do harm, either from the fillet being applied too tight, or from the parts being in ſuch a ſtate of tenderneſs as to render it altogether inadmiſſible.

When none of theſe remedies ſucceed, blood-letting ſometimes proves uſeful; particularly by the application of leeches to the parts affected, nor ought this ever to be omitted when the patient is of a plethoric habit, or when the pulſe is full. When Chordee takes place in a ſlight degree only, blood-letting is never neceſſary; but whenever it is ſevere, and reſiſts the other remedies we have mentioned, we ought never to heſitate in adviſing it. Blood-letting proves more effectual than any other remedy in preventing that permanent kind of Chordee, which ſometimes continues very diſtreſsful long after every other ſymptom of Gonorrhœa has diſappeared.

Opium is one of our moſt effectual remedies in every ſtage of this ſymptom, but particularly where it has been of long continuance. In this ſtate of the diſeaſe I have ſometimes found, where opium has failed, that hen-bane, the hyocyamus niger of Linnæus, has proved uſeful. A grain of the extract, properly prepared, may be given three times a day at firſt, and the doſe increaſed to two, three or more grains, according to its effects. I have given to the extent of ſeven and eight grains three times a day, with no inconvenience whatever; but this was after the patient had been for ſome weeks accuſtomed to the remedy.

SECT. IX.

Of Hæmorrhages from the Urethra.

IN the deſcription of the diſeaſe, we have ſeen that the matter of Gonorrhœa is frequently tinged with blood. When the quantity of blood is inconſiderable little or no notice is taken of it, the matter gradually acquires the common appearance, and a cure is accompliſhed in the uſual way; but when a blood veſſel of any magnitude burſts in the urethra, as ſometimes happens when the inflammation runs high, ſuch quantities of blood are diſcharged as prove highly alarming. I have known different inſtances of three or four pounds of blood being diſcharged in the ſpace of a few hours.

On the firſt appearance of this ſymptom complete reſt ſhould be immediately recommended, for nothing tends more to promote hæmorrhages of every kind than bodily exertion. The patient's bowels ought to be opened with a gentle laxative; his diet ſhould be of a cooling nature; he ought to be kept in a cool, well-aired apartment, and the penis ſhould be immerſed, from time to time, in a cold ſolution of ceruſſa acetata, in equal parts of vinegar and water.

In Hæmorrhages of every kind I have derived more advantage from a plentiful uſe of kino, and particularly in the ſymptom which we are now conſidering. It may be given in the quantity of twenty grains four times a day, and it may be uſed either by itſelf, or rubbed with equal parts of gum arabic and fine ſugar, which renders it both more palatable and more grateful to the ſtomach.

In ſome caſes I have derived advantage from aſtringent injection; particularly from an infuſion of red roſe leaves, ſtrongly impregnated with allum, as in No. 21, and from No. 14*, of which balſamum co-

paiba forms the baſis. The injections ſhould be thrown up with caution, and retained by compreſſing the urethra as long as the patient can bear them.

When all theſe means fail, and when there is cauſe to ſuſpect that the patient's life may be endangered by the loſs of too much blood, recourſe muſt be had to preſſure. I have, in different inſtances, put an immediate ſtop to the diſcharge by inſerting a bougie into the penis. When the bougie is large nothing farther is neceſſary; but when it does not prove ſucceſsful of itſelf, if the diſcharge proceeds from the fore-part of the penis, it may be ſtopped at once by gentle preſſure with a narrow roller, when it flows from the perineum, by continued preſſure with the hand or fingers.

With a view to obtain a long continued preſſure, a catheter of elaſtic gum may be uſed inſtead of a bougie, by which the patient may, with due care and attention, void his urine while the preſſure is continued: but if the bladder is emptied immediately before the bougie is introduced, it may, for the moſt part, be retained as long as is neceſſary.

Having in this and the preceding ſections conſidered Gonorrhœa in the different forms under which it occurs in men, we ſhall now offer a few obſervations upon the ſame diſeaſe as it appears in females.

SECT. X.

Of Gonorrhœa in Women.

WOMEN are leſs ſuſceptible of this diſeaſe than men; and with them it is alſo leſs violent in its ſymptoms, and leſs alarming in its conſequences.

Why men ſhould be more readily infected than women is difficult to explain; but that the diſeaſe ſhould prove more violent in the former is evident. The parts which it attacks are more numerous, and more

deeply ſeated; and we find that all the ſymptoms of this diſeaſe are mild or ſevere according as the parts affected are deeply ſeated, or otherwiſe. Hence, as long as the extremity of the urethra only is affected, the ſymptoms of Gonorrhœa are equally violent in both ſexes. During the continuance of the firſt ſtage of the diſeaſe in men, the pain is never more ſevere than we often meet with it in women, nor does it ever become ſo till the inflammation proceeds to a greater depth.

In women the diſcharge proceeds either from the vagina or urethra, and in ſome caſes, partly from both. When the vagina only is affected the pain attending it is inconſiderable, unleſs the matter is ſo acrid as to inflame the clitoris, nymphæ, or labia pudendi, as we ſometimes find is the caſe; but whenever the urethra is the ſeat of the diſeaſe, the ſame degree of ardor urinæ takes place as uſually occurs in men. Nay, in women this ſymptom is often more ſevere, and the inflammation by which it is produced proceeds more readily and more frequently in them to the bladder than it uſually does in men; for, in moſt inſtances of Gonorrhœa in women, they complain of ſevere pain over the loins, and all the region of the bladder, and their urine very commonly depoſits mucus in ſuch quantities as indicates a conſiderable affection of that viſcus.

This muſt happen from the paſſage to the bladder being conſiderably ſhorter in them than in men; and the urethra being wider and not ſo liable to be obſtructed, the ſymptoms ariſing from affections of this part are neither ſo ſevere, nor are they uſually of ſuch long continuance.

On examining the ſeat of Gonorrhœa in women, it is often difficult to determine whether the diſeaſe exiſts or not, and if the patient is inclined to conceal any circumſtances connected with her ſituation, it is altogether impoſſible to aſcertain this point with preciſion. This uncertainty occurs from the ſimilarity of Gonorrhœa to the matter of fluor albus a diſeaſe to

which women are ſo very liable, that, in ſome degree, ſcarcely any but the moſt robuſt are at all times free of it. Beſides a ſimilarity in the matter, the heat of urine, and inflammation of the contiguous parts, are often equally ſevere in the fluor albus as they commonly are in Gonorrhœa.

The chief diſtinction which external appearances afford between the two diſeaſes, is, that in fluor albus the matter is of a whiter colour than in Gonorrhœa. In the latter it is ſomewhat of a cream colour, whereas in fluor albus it is uſually of a pale white colour, and of a thinner conſiſtence. It muſt, however, be acknowledged, that theſe means of diſtinction are by no means ſufficient, and that no certainty upon this point can be obtained but by a full account being received from the patient herſelf of all the circumſtances connected with the caſe. When a woman is ſeized with heat of urine, and a diſcharge of matter from the parts of generation, and at the ſame time admits that theſe ſymptoms ſucceeded to her connection with a man labouring under Gonorrhœa, no doubt will remain of the nature of the diſeaſe: but when a patient inclines to conceal the real cauſe of her diſorder, no means with which we are yet acquainted are ſufficient to aſcertain the difference between theſe two diſeaſes.

It fortunately, however, happens, that the remedy which anſwers with moſt certainty in the one, proves equally powerful in the other: the remedy I allude to is an aſtringent injection. All the variety of injections enumerated in the foregoing ſections may be uſed with equal propriety here: but it is chiefly the vitriolic ſolution, No. 18, upon which much dependence ſhould be placed. When duly perſevered in, and thrown up five or ſix times a day, it ſeldom fails, in women, to accompliſh a cure of Gonorrhœa, and it proves equally ſucceſsful, as I have obſerved above, in removing the fluor albus.

Where, indeed, the conſtitution is much debilitated, and where the diſcharge is kept up by general relaxa-

tion of the conſtitution, although injections may remove the running, they will not prevent a return of it; but from much experience of their influence I can recommend them as one of the moſt powerful remedies that has yet been uſed for this very diſtreſsful ſymptom, to which a great proportion of the ſex are liable.

In females injections may be uſed with the greateſt freedom, when the diſcharge proceeds from the vagina; but in throwing injections up the urethra more circumſpection is neceſſary than is even required in men. The urethra in women being ſhort, and the ſphincter of the bladder more eaſily forced, if injections are thrown up with violence, they will readily paſs into the bladder; and as this might be productive of much irritation and pain, it ought to be carefully guarded againſt. With proper attention this is eaſily done; and as the running proceeds, for the moſt part, from within half an inch of the extremity of the urethra, there is no neceſſity for throwing injections farther.

Where the diſeaſe is entirely confined to the urethra or vagina a cure may always be accompliſhed by injections; particularly if theſe be accompanied with a proper attention to diet, and to the ſtate of the bowels: but where the bladder is already affected, other remedies are required. The patient muſt loſe blood in quantities proportioned to her ſtrength; the diet ſhould be very low; her bowels ſhould be kept eaſy with gentle laxatives; and the pain and irritation ſhould be leſſened or removed with doſes of opiates proportioned to the violence of theſe ſymptoms.

In women the mucous glands of the parts affected are apt to inflame, although not ſo frequently as in men, nor are the conſequences which reſult from them ſo apt to prove permanent. This may happen from none of theſe glands being ſo large in women: hence, when they ſwell from inflammation, they do not arrive at ſuch a bulk, and when they ſuppurate, the abſceſſes which enſue more eaſily heal. They

are chiefly ſituated in the labia pudendi, and in the vagina.

Swellings of this kind in women require the ſame method of treatment as in men. Blood-letting, both general and local, ſhould be adviſed on the firſt appearance of the tumours, and the parts affected ſhould be kept covered with a cold ſolution of ſaccharum ſaturni in water and vinegar. When this fails in preventing their increaſe, warm emollient cataplaſms ſhould be adviſed, in order to forward ſuppuration; and this taking place, the tumour ſhould be laid open with a free inciſion from one end to the other.

Where tumours of this kind arrive at a larger ſize than uſual, I have, in different inſtances, both in men and women, diſcharged the matter by the introduction of a ſeton. But as ſetons are not eaſily managed in this ſituation, the mode of opening them by inciſion ſhould be preferred; and it will commonly be found that it anſwers beſt to lay the abſceſs open through its whole length.

In the treatment of Gonorrhœa in women there are ſome who uniformly preſcribe mercury, although they never adviſe it in men. This they do from an idea of its being more frequently connected with Lues Venerea in women than in men.

I have not found, however, that this is the caſe, or that there is cauſe for mercury being given for this diſeaſe in women more than in men. Gonorrhœa often takes place in women as it does in men along with Lues Venerea: in ſuch circumſtances mercury muſt no doubt be employed; but by no means on account of the Gonorrhœa. So far as my obſervation goes, the diſeaſe is to be cured in both ſexes in the ſame manner, chiefly, as I have already remarked, by the uſe of aſtringent injections.

It happens, indeed, in women, as it does in men, that Gonorrhœa, particularly the milder forms of the diſeaſe, will diſappear whether injections are uſed or not. This in former times, was attributed to the purgative, demulcent, and aſtringent medicines, which in all caſes were uſed in lar[illegible]quantities;

but by later experience we know that none of theſe remedies are neceſſary, and that the diſeaſe diſappears as ſoon, and with as much certainty, where none of them are employed, merely by keeping the parts clean, with a proper attention to regimen.

In ſpeaking of cleanlineſs it is proper to remark, that both in men and women it ought at all times to be inculcated, particularly in women, where the matter of Gonorrhœa is very apt to become acrid, and excoriate the parts to which it is applied.

Attention to this circumſtance is often adviſed, on the ſuppoſition of chancres being likely to occur from the matter of Gonorrhœa, where it is allowed to reſt long upon any particular ſpot. Whatever excites attention to cleanlineſs will here prove uſeful; but no practitioner of obſervation will now admit that the advantages ariſing from it proceed from this cauſe. Were this the caſe, excoriations produced in this manner would not heal without the uſe of mercury; whereas we all know, that affections of this kind, proceeding from the matter of Gonorrhœa, never require mercury, and that they heal eaſily merely by bathing the parts frequently, and preventing the matter from reſting upon them in future.

SECT. XI.

Recapitulation.

I have thus finiſhed the obſervations I had to offer on Gonorrhœa as it appears both in the male and female patient; but it may not be improper in this place, by a ſhort and general recapitulation, to bring the ſubject into one point of view.

1. From the arguments ſtated in different parts of the preceding ſections it appears that Gonorrhœa is a local diſeaſe, proceeding from a ſpecific contagion, and not neceſſarily connected with any other.

2. That the discharge of matter which takes place is not the effect of ulceration, but proceeds from an inflamed state of the urethra and contiguous parts.

3. That this inflammation, while confined to the membrane of the urethra, particularly to the parts near to the extremity of the penis, is never productive of any alarming symptom: a discharge of matter, accompanied with ardor urinæ, and some slight degree of Chordee, being almost the only ones that take place.

4. That the disease is always formidable in proportion to the depth of parts that are affected, the symptoms which occur being more or less violent, and productive of more or less hazard, according as the inflammation has reached to Cowper's glands, the prostate gland, or to the bladder.

5. That in the cure of Gonorrhœa no advantage is derived from mercury, or any remedy acting altogether upon the constitution. The disease being entirely local no medicine proves useful but such as act directly upon the parts affected.

6. That where the membrane of the urethra is alone affected, no remedy proves so successful as astringent injections*.

7. That these injections, in order to act with safety and advantage, must be thrown up with much caution, and repeated from six to eight or ten times a day, at the commencement of the disease; less frequently as the discharge lessens, and at last in a gradual manner, laid entirely aside.

8. But although injections of this description may be used with safety in all cases of Gonorrhœa where the membrane of the urethra only is affected, that they are never employed but with much risk of doing harm where the inflammation has reached to Cowper's glands, to the prostate gland, or to the bladder.

9. That the greatest attention is therefore required in distinguishing between the different stages of Gonorrhœa; the want of this having, with some prac-

* Vide Numbers 18 and 19 in the Appendix.

titioners, brought the uſe of injections into diſcredit, when the fault did not lie in the remedy, but in the improper application of it.

10. That in all ſtates of the diſeaſe, where the inflammation has gone farther than the membrane of the urethra, inſtead of wiſhing to remove the diſcharge, we ſhould rather endeavour to ſolicit a greater flow of it; the running, in ſuch circumſtances, being only a ſecondary object, when compared with the conſequences which are apt to enſue from inflammation proceeding to a great height. For the more certain prevention of which, blood-letting, both general and local, are particularly uſeful on the firſt approach of ſuch ſymptoms as indicate an affection, either of the mucous glands of the urethra, the proſtate gland, or bladder.

11. That when, notwithſtanding of blood-letting, a low regimen, and other parts of an antiphlogiſtic courſe, tumours form in Cowper's glands, or in any other parts contiguous to the urethra, and when ſuppuration occurs in them, the matter ſhould be immediately diſcharged by an inciſion of a ſufficient ſize, and the ſore treated in the uſual way.

12. That in affections of the proſtate gland, which do not give way to blood-letting, opium alone is to be depended on for relieving the irritation and diſtreſs which enſue from them; the pain being often ſo ſevere that no other remedy proves in any degree uſeful. That opium, in theſe caſes, proves always moſt effectual when applied directly to the parts affected, in the form of injection; and that extract of hyocyamus may be uſed when it is found that the coſtiveneſs, which uſually reſults from opium, proves hurtful.

13. That when the bladder is affected, opium or hyocyamus are in like manner to be uſed to relieve pain. That uva urſi is the moſt effectual remedy for obviating the diſcharge of viſcid mucus, the uſual conſequence of inflammation of the bladder, and that the thickening of the coats of the bladder, which inflammation, from whatever cauſe it ariſes, is apt to

induce, has in ſome caſes been removed by a gentle courſe of mercury.

14. And laſtly, it appears, that the leading ſymptoms of Gonorrhœa are ſo much alike in both ſexes, that the general method of treatment is ſimilar in both: only that in women, from the ſituation and organization of the parts affected admitting of it, injections may at all periods of the diſeaſe be uſed with more freedom than in men; an inflamed ſtate of the bladder being, in womne, almoſt the only circumſtance that can take place in Gonorrhœa to render injections improper.

CHAP. III.

Of the Conſequences of Gonorrhœa Virulenta.

SECT. I.

General Remarks on the Conſequences of Gonorrhœa Virulenta.

ALTHOUGH the treatment pointed out in the preceding ſections for the cure of Gonorrhœa will in general prove ſucceſsful, yet every candid practitioner will admit that it is not always ſo, and that inſtances occur of different ſymptoms proving obſtinate, notwithſtanding a careful and attentive application of every remedy with which we are acquainted.

The cauſes of this failure I have already endeavoured to explain. In this part of the work I mean to ſpeak of the conſequences of Gonorrhœa, ſome of which are, in moſt inſtances, the effect of miſmanagement, while others enſue after the greateſt care

and attention in the conduct of the cure. They are all, however, of a local nature, and not neceſſarily connected with any general diſeaſe of the conſtitution. The following is the order in which I mean to treat of them:

Gleet; ſeminal weakneſs and impotency ſtrictures in the urethra; abſceſſes and fiſtulæ in perineo; deranged ſenſations in the bladder and urethra; ſwelling of the teſticle; ſwelling of the epidydimis and ſpermatic chord; ſwellings of the lymphatic veſſels of the penis; ſwelling of the glands in the groin; excoriations of the glans and prepuce; phymoſis; paraphymoſis; warts on the glans, prepuce, and labia pudendi. And, laſtly, I ſhall add a few obſervations on what may be termed Gonorrhœa Simplex, in which a diſcharge occurs from the urethra, without any infectious matter being applied to it.

SECT. II.

Of Gleets.

WHEN the diſcharge in Gonorrhœa continues obſtinate, after the ſymptoms of inflammation are removed, the diſeaſe is then termed a gleet.

From this definition we might be led to imagine that the import of the term Gleet would be clearly and generally underſtood, and that no riſk could occur of its being miſapplied. This, however, is not the caſe; for the ſymptoms which one practitioner conſiders as Gleet, are by others ſaid to be Gonorrhœa. Some aſſert that Gleet does not take place till the diſcharge becomes colourleſs, and reſembles mucus; while others are of opinion that Gonorrhœa changes into Gleet before this change of colour is perceptible.

All agree in this, that Gleet does not take place ſo long as the diſcharge is capable of communicating infection; but no preciſe marks have yet been diſcovered by which we can judge of this circumſtance

with certainty. When the discharge becomes transparent and viscid, like mucus, I believe that no infection will ever ensue from it; but I also suppose that it is often equally harmless long before this change has appeared in it. By the use of astringent injections demulcents, and cooling purgatives; and, in some cases, by the lapse of time alone, the running in Gonorrhœa will lose its colour, acquire a mucous appearance, and even abate in quantity, and yet it will again become yellow, and appear in larger quantities than at first. In such circumstances the discharge may be considered as altogether deprived of the power of communicating infection; at least no instance of the contrary has ever occured to me, and I have reason to think, that, in every instance it will be found to prove inoffensive where the inflammation by which it was at first induced has been once completely removed, whatever the method of cure may have been by which this was accomplished: while, on the contrary, I am convinced, from a variety of facts which might here be enumerated, that so long as the primary inflammation of Gonorrhœa continues, however long this may be, the matter produced by it is equally capable as at first of communicating infection. Admitting, therefore, that the running should not be denominated Gleet, so long as it is in any degree infectious, it is evident that this term ought not to be applied to it, till it has become clear and transparent, or till the inflammation by which it was at first induced is removed, and of which we can only be certain by the ceasing of the pain which accompanied the inflammatory state of the disease. The discharge in Gonorrhœa frequently disappears altogether, and the patient considers himself, for the space of several days, nay, in some instances, for weeks, as completely cured; when, either by violent exertion on horseback or on foot, by excess in drinking, or too early connection with women, the running will again take place, with every mark of a new infection. When the patient, however, is conscious of not having ex-

poſed himſelf to the riſk of being infected, he may always conſider this renovated diſcharge as of a harmleſs nature, provided the inflammation and pain by which it was at firſt excited had previouſly diſappeared. Among other proofs of this, I might mention various inſtances of married men, who, from Gonorrhœa contracted in youth, have frequently, during life, from one, or other of the cauſes I have mentioned, experienced frequent returns of this diſcharge, who, in this ſituation, have had frequent connexion with their wives, without communicating the diſeaſe. In ſome of theſe the diſcharge will be abſent for ſeveral weeks, nay, for months together; while in others it has not diſappeared for more than two or three days at once, during the ſpace of twenty years.

In all of them, upon its firſt recurrence, it has exactly the appearance of a new infection; but the event ſoon ſhews it to be materially different. If aſtringent injections are employed, they, for the moſt part, put an immediate ſtop to the running; and, when left to itſelf, the matter becomes more quickly colourleſs than it ever does in a recent caſe of Gonorrhœa.

In one inſtance, a gentleman applied to me in a ſtate of the greateſt diſtreſs, the day after his marriage. He came upwards of twenty miles from the country, with every appearance of a recent clap; which, he aſſured me, had broke out that very morning, although no appearance of an infection, under which he formerly laboured, had been perceived for upwards of three months, nor had he, during that period, been expoſed to the riſk of getting a new one. This, in the ſtate of temporary frenzy, under which I found him, led to the diſtreſsful idea of his having been infected during the preceding night, by his newly married wife. I aſſured him that this was impoſſible; for that, independent of the ſurety which he derived from the unblemiſhed character of his wife, no infection could have appeared with ſuch violence in ſuch a ſhort ſpace

of time; and on hearing that he formerly laboured under Gleet, I alſo ventured to ſay, that the diſcharge would probably diſappear almoſt as ſuddenly as its approach had been rapid. My prediction proved true. I immediately threw up a vitriolic injection, and cauſed him to repeat it three or four times in the courſe of a few hours. By five or ſix o'clock in the afternoon nothing but a ſlight oozing from the urethra was perceptible; I furniſhed him with more of the injection, and he went home perfectly ſatisfied in the evening.

This happened ſeveral years ago, and the ſame appearances have uniformly recurred ſince that period, upon every connection with his wife, but no infection has ever been communicated to her. For a conſiderable time he always had recourſe to the injection on the running taking place, but at laſt, being perfectly convinced of its being perfectly harmleſs, he allowed it to go on; ſo that for theſe laſt three or four years, he has ſeldom been many days together free of it.

But although patients, from being long accuſtomed to this diſcharge, come to find that it does not communicate infection, ſtill they can never look upon it with indifference; they all find it troubleſome and diſtreſsful, and are therefore, at times, anxious to get free of it. When, at the ſame time we conſider, that a long continued Gleet is apt to lay the foundation of ſome very obſtinate and perplexing affections of the urethra, it will at once appear, that in every inſtance, this ſymptom merits our ſerious attention.

Gleet ſeems evidently to ariſe from different cauſes, requiring different modes of treatment: it will therefore be proper to conſider them ſeparately.

1. The moſt frequent variety of Gleet ſucceeds to the firſt ſtage of Gonorrhœa, in which we do not ſuppoſe that the original inflammation proceeded farther than the urethra itſelf, or the ſmall mucous glands immediately emptying into it.

When the cure of this variety of Gonorrhœa is interrupted, either by improper treatment, or by neg-

ligence on the part of the patient, and when the diſcharge is thereby allowed to go on for any unuſual length of time, Gleet is thus frequently produced. Aſtringent injections will, for the moſt part indeed, put a ſtop to the running, but the ſlighteſt exceſs very commonly excites a return of it.

This variety of the diſeaſe we conclude to proceed from relaxation and debility in the parts firſt affected, and that the obſtinacy with which it often continues depends upon a farther degree of weakneſs, induced in theſe parts by the longer continuance of the running; by which it would appear to have a power, if not counteracted, of continuing or propagating itſelf.

By ſome, this idea of Gleet proceeding in any inſtance from weakneſs, is ridiculed; and as the ſuggeſtion comes from very reſpectable authority I think it right to take notice of it *.

Mr. Hunter obſerves, that by mechanical weakneſs is underſtood the not being able to perform ſome action, or ſuſtain ſome force; by animal weakneſs the ſame; but he cannot underſtand the expreſſion when applied to an animal performing an uncommon, or an additional action, as ſeems from the quantity of matter diſcharged, to happen in Gleet.

This opinion appears to be founded upon the idea of an increaſed diſcharge being always the conſequence of an increaſed actions in veſſels of the part from whence it proceeds; and it orginates from his not diſcriminating between general debility and local relaxation, or loſs of tone in a particular part.

Although an increaſed diſcharge in the veſſels of any part would ſeem to imply an increaſed action in theſe veſſels, yet the reverſe of this will, I believe, in moſt inſtances, be found to happen; and that affections of this nature proceed chiefly, if not entirely, from local debility. Loſs of tone in the exhalents will neceſſarially produce a more copious diſcharge of their contents than will probably happen while

* Vide Treatiſe on the Venereal Diſeaſe by John Hunter, p. 100.

their power of retention remains entire. Where theſe veſſels unconnected with the reſt of the ſyſtem this would not take place; but connected as they are with the arterial ſyſtem, while the vis a tergo remains the ſame, any partial debility to which they may be liable, muſt, perhaps univerſally, be attended with a preternatural effuſion of their contents.

There is much reaſon to ſuppoſe, from the phenomena which occur in inflammation, that an increaſed action takes place in the veſſels of the part affected: but during the exiſtence of this increaſe of tone, we commonly find that in Gonorrhœa, the diſcharge is not ſo conſiderable as it afterwards becomes when the ſymptoms of inflammation abate. Nay, it is univerſally known that the running is apt to ſtop entirely when the parts affected inflame to a greater degree than uſual, and that nothing ſo readily ſolicits a return of it as the removal of this inflammation, by the uſe of emollient injections.

This is an argument of ſome importance in favour of our opinion, and it is farther confirmed by the nature of all the remedies which we employ in Gleet, which are either of an aſtringent, ſtrengthening kind, or conſiſt of ſtimulating injections, and other applications of a ſimilar nature, which ſeem to act by exciting an increaſed exertion in the veſſels of the affected parts, by which they are enabled to reſiſt the action of the arterial ſyſtem from behind.

I therefore conſider it as clear and decided that this variety of Gleet proceeds from relaxation and debility of the exhalents of the urethra, and, perhaps, of the excretory ducts of the ſmaller mucous glands of that paſſage.

This opinion of Gleet being connected with debility, may indeed be carried too far, as happens, I believe, daily in common practice. Where Gleet has run on for any length of time, many think that it has either at firſt proceeded in a great meaſure from general weakneſs of the conſtitution, or that it has tended to excite ſuch a general degree of debility as will

effectually obſtruct every attempt towards a cure, till this ſtate of the ſyſtem be removed.

Hence the patients are with much care and anxiety enjoined the uſe of bark, ſteel, and other tonics, with a view to remove the general debility; while leſs attention is uſually given to the real cauſe of the diſeaſe, the local relaxation of the parts originally affected.

That general weakneſs often takes place in Gleet, and that it may even be induced by a long continuance of the diſcharge, will not be denied; but I have much reaſon to think, that in practice, this idea is often carried farther than it ought to be. This muſt neceſſarily be the caſe whenever it makes us loſe ſight, as I have obſerved above, of the real origin of the diſeaſe; but there is alſo cauſe to imagine, that in giving additional vigour to the ſyſtem at large, we tend to increaſe the diſcharge by the urethra, unleſs the tone of the parts which have been more particularly weakened be at the ſame time reſtored. The reaſon of this has been explained above, and I have often had evident proofs of the hurtful tendency of the practice; by which, while the patient, from the effects of ſea-bathing, a full diet, and the uſe of tonics, was daily getting more full in fleſh than he was before, the diſeaſe has evidently been gaining ground, from no particular attention being given to the ſtate of the parts from whence the running proceeds.

In a ſtate of univerſal debility, whether induced by a long continuance of the diſcharge, or any other cauſe, the greateſt attention ought certainly to be given to it; but what I wiſh to inculcate is, that in common practice we rather do harm by conſidering this general relaxation of the ſyſtem as the firſt object of attention, when, in fact, it often either does not take place at all, or only in ſuch a degree as to render it a matter of very trifling importance, when compared with the diſeaſe in the urethra.

In a great proportion of caſes of this variety of Gleet, our attention ſhould be almoſt entirely direct-

ed to this affection of the urethra; and by experience we find that ſuch remedies are chiefly to be depended on as act directly upon the ſeat of the diſeaſe.

A variety of medicines have been employed for this purpoſe, but they may all be comprehended under the two general heads of aſtringents and ſtimulants; for all that have yet been found uſeful in Gleet ſeem either to act by their aſtringent properties or by their power of ſtimulating the parts to which they are applied.

When aſtringent injections have not been already employed, they ought, in the firſt place, to get a full trial; for although they do not always prove ſucceſsful, yet they frequently do ſo, and we ſeldom or never find that any riſk enſues from them, as ſometimes do from ſtimulating injections.

Any of the aſtringent ſolutions for which preſcriptions are given in the Appendix, may be employed, but the vitriolic ſolution, No. 18, is one of the ſafeſt, and very commonly proves the moſt effectual. In the uſe of all injections of the aſtringent kind it is neceſſary to throw them frequently up, not leſs than ſix or eight times a day. This was particularly inculcated in the uſe of injections in Gonorrhœa, and it proves equally proper in this variety of Gleet.

But where aſtringent injections have already been employed for the cure of the preceding Gonorrhœa, and where there is no doubt of a complete trial having been given them, in ſuch circumſtances, as there would be no cauſe to expect advantage from a farther uſe of them, they ought to be laid aſide.

In that ſtate of the diſeaſe where a plentiful diſcharge takes place, with little or no pain, and where aſtringents have been employed with no advantage, ſtimulating applications become particularly proper.

The ſtimulants we employ are of two kinds; acrid ſolutions and mixtures in the form of injections, and bougies. Which ever of them are uſed muſt be of ſuch a nature as to ſtimulate the parts gently to which they are applied, but not ſo ſtrong as to excite inflam-

mation in any conſiderable degree. They prove moſt ſucceſsful where they give only a moderate degree of pain and heat in the urethra; ſuch as is felt in the commencement of the firſt ſtage of Gonorrhœa. Inſtances, indeed, often occur of a newly contracted clap carrying off a Gleet that has been of long duration; and as this is always productive of ſome degree of inflammation, we conclude that the remedies employed in Gleet muſt act in a ſimilar manner, viz. by gently ſtimulating and exciting the parts to inflame in ſuch a degree as experience ſhews to prove uſeful. To excite violent pain would at all times be improper, as the inflammation which this would produce might go farther than we would incline it to do. Much harm, indeed, has been done by want of attention to this circumſtance. A ſwelled teſticle is not an uncommon effect of it; and I have known the inflammation carried to the proſtate gland and bladder.

This, however, may always be prevented; nor can it ever occur but from great inattention. Wherever injections are uſed, they ſhould at firſt be ſo weak as to excite only a very ſlight degree of uneaſineſs.

In the formulæ annexed to this they are of ſuch a ſtrength as to act in this manner in a great proportion of people, although, in ſome inſtances, I have found them rather weaker than neceſſary. An addition of ſtrength, however, is ſo eaſily given, that at firſt they ought never to be ſtronger.

One of the beſt injections for ordinary uſe is a weak ſolution of corroſive ſublimate in water*. That is, in the proportion of an eighth part of a grain of the mercury to an ounce of water, which is as ſtrong as it ought ever to be uſed at firſt; although I have met with ſome, who, in a gradual manner, have been brought to bear half a grain to an ounce. I know that ſome have adviſed it of a ſtill greater ſtrength, even to the extent of a grain of mercury to the ounce of water; but although I am in the daily practice of uſing this remedy, I never found any perſon who could bear

* Vide Appendix, No. 24.

it of this ſtrength. I therefore ſuſpect that thoſe who adviſed it have never known it uſed.

I have taken the more particular notice of this, from ſeveral inſtances having fallen within my own obſervation, of very pernicious conſequences enſuing from the uſe of injections containing too great a proportion of mercury, while no inconveniency ariſes from them when not ſtronger than thoſe I have pointed out.

In ſome caſes, where a ſolution of corroſive ſublimate by itſelf has failed, I have known the addition of ſaccharum ſaturni prove uſeful*; and in ſome very irritable patients, in whom even the ſmalleſt quantity of the mercury excited too much pain, an addition of mucilage has enabled them to bear it. Of this a formula is given in the Appendix†.

A ſolution of crude ſal ammoniac proves‡ ſometimes effectual in this ſtate of Gleet. The volatile alkali, ſuch as ſpiritus corn. cervi, and ſpiritus ſalis ammoniaci, properly diluted, make likewiſe uſeful injections for this purpoſe, as in formulæ No. 28 and 29: and verdigriſe, diſſolved either in oil, or in ſpirit of ſal-ammoniac, afford alſo a very effectual form of injection for the ſame purpoſe: formulæ of theſe laſt are given in Nos. 30 and 31.; and in ſome inſtances tincture of cantharides, properly diluted, as in No. 32, has been found to anſwer.

Beſides the circumſtance of aſcertaining the proper ſtrength of theſe injections, a good deal of addreſs is required in the application of them. They muſt not be employed either ſo long or ſo frequently as is required for aſtringent injections; with theſe no harm can occur, however frequently they may be applied; but injections of a ſtimulating nature ſhould not be continued longer than is juſt neceſſary for exciting ſome degree of pain and inflammation in the affected parts.

This being accompliſhed, a few days ſhould elapſe before any other remedy is employed; for it ſome-

* Vide Appendix, No. 25. † Appendix, No. 26. ‡ No. 27.

times happens that the running will ſtop after theſe ſtimulating injections are laid aſide, although, during the uſe of them, it appeared to be increaſed. But when, after an interval of three or four days, this does not appear likely to happen, injections of an aſtringent kind ſhould be immediately employed, as we have already adviſed in the firſt ſtage of Gonorrhœa.

Even theſe will not always ſucceed; for it ſometimes happens that the running, although it may diſappear for a few days, will yet return again and again, with equal violence as at firſt.

In ſuch circumſtances, the ſtimulating injections muſt be again renewed, and the inflammation ought now to be excited in a degree ſomewhat greater than before; for I have commonly found that this may be done with more ſafety in the ſubſequent applications of this remedy; and in the more advanced ſtages of Gleet the higher the degree of inflammation that can with ſafety be excited, the greater certainty there is of its proving effectual.

When injections do not accompliſh a cure, we endeavour to effect our purpoſe by the uſe of bougies. By irritating the urethra, bougies anſwer the ſame purpoſe with ſtimulating injections; and, in ſome inſtances, they have appeared to prove more effectual, perhaps from the ſupport which they afford to the parts which have been deprived of their tone. This, however, does not happen with any kind of certainty, inſomuch that I always give the preference to injections in the firſt inſtance, as being leſs formidable in the application to all ſuch patients as have not been accuſtomed to the uſe of bougies.

Bougies compoſed of the moſt ſimple materials, commonly anſwer all that we expect from this kind of remedy; but when theſe fail in exciting a ſufficient degree of inflammation, they are eaſily rendered more active by dipping them in oil of turpentine, in a thin liniment of wax and oil with a ſmall proportion of red precipitate, or in common baſilicon reduced with oil of turpentine, to the conſiſtence of a liniment.

I have no reaſon to think that mercurials act in the cure of Gleet in any reſpect as ſpecifics; but the ſtimulus which mercurial ointment gives to the urethra, when applied upon bougies, proves often as effectual as that from any medicine which we employ. It is proper, however, to obſerve, that the ointment for this purpoſe ought to be ſtrongly impregnated with mercury: there ſhould not be leſs than equal parts of quickſilver and hog's-lard; and I have ſometimes thought that mercury, extinguiſhed by triturating with honey, acts more certainly as a ſtimulant than it uſually does in the form of an ointment.

If the conſtitution has been much debilitated, we ought, while the application of remedies to the diſeaſed parts is going on, to adviſe a nouriſhing, invigorating diet. The patient ſhould be allowed animal food, and a moderate portion of red wine daily; and in ſuch circumſtances bark may with propriety be exhibited as a tonic: but for the reaſons I have given above, I have much cauſe to think that the general practice of giving bark, ſteel, and other tonics, in every caſe of this kind, is by no means well founded, and in many inſtances that it does harm.

Some of the ſtimulating aſtringent balſams, given internally, frequently prove uſeful here; probably from their tendency to ſtimulate in a more particular manner the organs of urine than any other part of the body. Balſamum capaiba is chiefly uſed for this purpoſe, but Canada balſam, and all the turpentines, may be employed with perhaps equal advantage. Fifteen or twenty drops of any of theſe may be given three or four times a day.

A cautious uſe of cantharides has alſo proved ſerviceable in this variety of Gleet. Ten drops of the tincture may be given two or three times a day.

But although ſome advantage may be derived from all of theſe remedies, when employed along with local ſtimulants, as we have adviſed above, yet no dependance is to be placed upon them when they are not conjoined with theſe. This, it may be ſaid, ren-

ders the advantages to be expected from them doubtful and equivocal; but in different cafes I think I have perceived greater advantages from a combination of thefe two fets of remedies, than ufually occurs from a feparate ufe of either of them.

Cold bathing is a remedy commonly advifed in Gleets, and where the conftitution is fo much debilitated as to require attention, it will very generally anfwer a good purpofe; otherwife no advantage can probably accrue from it, if it be not from the local application of cold to the parts chiefly affected. In this view, the daily effufion of cold water upon the penis, and the bathing of the perineum, proves fometimes ufeful.

2. The next moft frequent variety of Gleet fucceeds to the fecond ftage of Gonorrhœa. After all the fymptoms excited by the actual prefence of inflammation have fubfided, this variety of the difeafe is very apt to terminate in Gleet.

In the third fection of the laft chapter I endeavoured to fhew, that in this ftage of Gonorrhœa, Cowper's glands are chiefly affected, and that they afford a great proportion of all the matter that is difcharged. Any inflammation which occurs along with this in the membrane of the urethra, is, for the moft part, eafily removed, fo that the Gleet, which often fucceeds, proceeds either altogether, or nearly fo, from the cavities of thefe glands.

Gleet, proceeding from this caufe, is, for the moft part, eafily diftinguifhed from that which we have defcribed as the firft or moft frequent variety of the difeafe. In this laft the matter ufually proceeds from within an inch, or little more, of the glans, or when parts farther back are affected, the difcharge is forced off from them by very gentle preffure upon the perineum: but, in the other, the matter is, in every inftance, found to proceed from the upper part of the urethra; a greater degree of preffure upon the perineum is neceffary to force it out; and fome degree of fulnefs, accompanied with irritation, and

even pain, is experienced on the perineum being preſſed upon for this purpoſe.

We are alſo aſſiſted in the diagnoſis by the hiſtory of the preceding Gonorrhœa; for it will be uniformly found that the firſt variety of Gleet has ſucceeded to the firſt ſtage of Gonorrhœa, and that the ſecond ſtage of Gonorrhæa has given riſe to that which we are now conſidering.

In the treatment of Gleet it is of importance to have this difference aſcertained, for the remedies which commonly accompliſh a cure in the one, are uſed in the other either without any advantage whatever, or even with evident proofs of doing harm. Thus, although in the firſt variety of Gleet, we depend ſo much upon ſtimulating injections, that a cure in moſt inſtances cannot be accompliſhed without them; in the other, where the larger glands of the urethra are affected, they very commonly render every ſymptom worſe than it was before. They at leaſt do ſo where the injection is of ſuch a ſtrength as to excite pain and inflammation; and if weaker than this, it may be uſed for an indefinite length of time, without any effect reſulting from it. The glands opening into the urethra being here the ſeat of the diſeaſe, aſtringent injections, applied as we have elſewhere obſerved, to their excretory ducts, may produce a temporary ſtoppage of the diſcharge; but, as they do not reach the cavities of the glands, no permanent advantage can be expected from them. While, again, when an injection is uſed of ſuch a ſtrength as to excite inflammation upon the ends of theſe ducts, it is very apt to produce ſwellings in the glands themſelves, which at laſt commonly terminate in ſuppuration, to the great diſtreſs and diſappointment both of the patient and practitioner.

Whenever it is therefore diſcovered with certainty, that this variety of Gleet exiſts, injections ſhould be no longer employed; or when, for the ſatisfaction of the patient, a farther trial of this remedy becomes

neceſſary, ſuch preparations only ſhould be uſed as are moderately aſtringent.

In ſuch circumſtances bougies, and bliſters to the perineum, are the moſt effectual remedies I have ever employed. The bougies ſhould be of the mildeſt kind, ſuch as ſtimulate the parts gently, without exciting inflammation. By this, and by the ſupport which their ſize and form afford to the weakened parts, they often prove highly ſerviceable; and even when they do prove more powerfully ſtimulating than we may have wiſhed or expected, they do not ſo readily do harm as injections; for the inflammation with which this may be attended is always accompanied with an inſtantaneous diſcharge of matter, by which the inconvenience that otherwiſe might reſult from them is very effectually prevented.

Bougies ought, for every purpoſe, to be as large as the capacity of the urethra will admit; but their being of a full ſize is more particularly neceſſary in this variety of Gleet than for any other malady; for it is chiefly by their ſize that they prove uſeful here.

In moſt inſtances of this kind it appears, in the courſe of a few days, whether bougies are to be of ſervice or not; but no permanent advantage is ever to be expected from them if they are not continued for a conſiderable time. When the diſeaſe has been of long duration, the bougies ought to be applied for the ſpace of ten or twelve weeks, and not even deſiſted from then if the cure be not compleated. It is proper, however, to obſerve, that after bougies have been uſed for ſuch a length of time as ought to accompliſh a cure, they ſhould from time to time be laid aſide, that the effects produced by them may be diſcovered; for while they are daily introduced we can never know with certainty whether any diſcharge which takes place is the effect of the diſeaſe, or of the irritation which they excite; as bougies can never be applied for any length of time together, not even to a ſound urethra, without being found covered with matter, or with mucus in the form of matter, on their being withdrawn.

When bougies fail, a bliſter applied over the whole perineum ſometimes proves ſerviceable. Whether it is by the ſtimulus which they give to the parts affected, or by the diſcharge which they excite, is uncertain; for in ſome an evident advantge enſues upon the firſt or ſecond day from their application, and before any quantity of diſcharge can have occurred, while in others no effect is obſerved to reſult from them till the ſecond, third, or perhaps, fourth bliſter has been applied. In a few inſtances, ſome advantage has appeared to be derived from a ſmall portion of the bliſtered part being kept open with epiſpaſtic ointment, which, in two caſes of much obſtinacy, led me to adviſe the introduction of a ſmall ſeton on one ſide of the perineum; but although this ſeemed likewiſe to leſſen the diſcharge, the advantage derived from it was neither ſo great nor ſo obvious as to compenſate the very diſagreeable nature of the remedy.

In very obſtinate caſes of this variety of Gleet, the patient will frequently be found to be of a ſcrophulous conſtitution. If the diſeaſe has not already appeared in a more evident manner in other parts of the body, it will at leaſt often happen that the glands of the neck, and other ſuſpicious parts, will appear to be tumefied, and that the complexion of the patient, which is commonly delicate, gives much cauſe to conclude that the ſyſtem is not free of it.

In ſuch circumſtances, all the remedies uſually employed in ſcrophula will from time to time, be adviſed. Bark and hemlock have ſometimes proved uſeful here; but no remedy that has yet been employed in ſcrophula is in any degree equal to ſea-bathing.

In enumerating the different varieties of Gleet, I have proceeded in the order in which they moſt frequently appear. The next of which I ſhall take notice proceeds from ſtrictures in the urethra.

In an enſuing ſection I ſhall find it neceſſary to enter more minutely upon the conſideration of venereal ſtrictures in the urethra: at preſent, therefore, it

ſeems only requiſite to ſay, that they are to be conſidered as a very frequent cauſe of Gleet. The ſpongy ſurface of the ſubſtance from which theſe ſtrictures are produced is very apt to become tender and excoriated. A ſlight degree of ulceration thus takes place which continues to give out matter while any degree of the ſtricture remains, and where the extent of the diſeaſe is conſiderable, this of itſelf would afford a very copious diſcharge; but beſides this, the remora which every ſtricture produces, of urine and mucus between the part on which it is ſeated and the bladder, acts as a very powerful cauſe of irritation, and in this manner renders the diſcharge more abundant than we almoſt ever find it to be in Gleet, proceeding from any other cauſe.

Where ſtrictures are not ſuſpected as the cauſe of the diſcharge, as often happens where the obſtruction to the flow of urine is not remarkably great, the patient as well as the ſurgeon is apt to be deceived, and to proceed daily with the plan of effecting a cure by injections, balſam of copaiba, and other aſtringents. None of theſe remedies, however, have any influence, and the diſcharge, after many years continuance, is found to be nearly in the ſame ſtate, either as bad, or perhaps worſe, than at firſt. Of this every practitioner muſt have met with inſtances, and they always prove the ſource of much perplexity and embarraſſment.

In every caſe, therefore, where Gleet reſiſts the uſual remedies, and is thus particularly obſtinate, it ought to be our firſt object to aſcertain the real ſtate of the urethra, and to learn whether ſtrictures are preſent in it or not. In ſome caſes this will at once be known from the ſtate of the ſymptoms obtained from the patient, as well as from external examination of the urethra from the point, of the penis to the fundament. This, however, will only happen in the more ſevere degrees of the diſeaſe. Where the obſtruction is ſlight, it may, as we have already obſerved, paſs unnoticed; ſo that in all ſuch circum-

ſtances, and where there is any cauſe for doubt, the paſſage ſhould be examined with a bougie, by which alone any certainty upon this point can be obtained.

When the exiſtence of ſtricture is diſcovered, all other remedies ought at once to be laid aſide, and the cure truſted entirely to bougies. Hereafter we ſhall have occaſion to ſpeak more particularly of bougies; at preſent we need only ſay, that they are the only remedy upon which we can depend for the removal of ſtrictures, and that they very commonly prove effectual when duly perſiſted in.

When the diſcharge proceeds entirely from ſtrictures, it will, for the moſt part, ſoon ſubſide on theſe being removed; but when it continues more than a few days after the bougies are withdrawn, it will be proper to employ aſtringent injections in order to carry it off. Lime-water anſwers well; for this particular purpoſe, indeed, it anſwers better than any other form of injection I have tried, but it requires to be diluted with an equal quantity of common water.

4. The laſt variety of Gleet of which we have to take notice proceeds from a ſwelled ſtate of the proſtate gland, and ſucceeds, as we have already had occaſion to ſee, to the third ſtage of Gonorrhœa Virulenta.

In treating of Gonorrhœa the ſymptoms were enumerated by which affections of the proſtate gland may be diſcovered; but we have no certain means of knowing to what extent it may be ſwelled but by examination with the finger in ano.

Beſides the inconveniency which occurs here from the diſcharge itſelf, and which is common to this with every variety of Gleet, there is always a good deal of uneaſineſs, and even pain, produced by the ſwelling of this gland, which excites a more frequent deſire to paſs water than any other variety of the diſeaſe, together with a ſenſation of heat and fulneſs over the whole parts contiguous to the anus. The teneſmus which often takes place is alſo a very troubleſome ſymptom.

Gleet, proceeding from this cauſe, is ſometimes combined with other varieties of the diſeaſe, particularly with that which was laſt deſcribed. In this caſe the diſcharge has moſt frequently the appearance of being a mixture of pus and mucus; but when the running proceeds entirely from an affection of the proſtate gland, it is thinner than purulent matter, and, although ſometimes tinged of a white or yellow colour, it is more frequently of the conſiſtence and colour of mucus. This makes it often be miſtaken for a diſcharge of ſemen.

No injections are of any utility in this variety of Gleet; nor is any advantage derived from bougies. On the contrary, they are both apt to do harm, particularly a perſeverance in the uſe of them; a practice which thoſe not accuſtomed to this branch of buſineſs are very apt to fall into. Swellings of this gland are very commonly attended with ſome degree of obſtruction to the paſſage of urine. and when this is miſtaken for ſtrictures, as often happens, bougies are immediately adviſed in order to remove it.

Bougies, however, never prove uſeful here: on the contrary, they very commonly irritate the gland to ſuch a degree, as to excite both an increaſe of the pain and of the diſcharge.

Opiates are the remedies upon which we place moſt dependence. By allaying irritation, they not only keep the patient free from pain, but in doing ſo they tend more than any other remedy to leſſen the diſcharge. It muſt, however, be acknowledged, that they act chiefly as palliatives; but the mere prevention of pain is a point of no ſmall importance in a diſeaſe which otherwiſe is apt to render the patient miſerable. In ſpeaking of affections of this gland in the third ſtage of Gonorrhœa, I adviſed opiates to be uſed in clyſters, inſtead of being taken by the mouth. They do not, in this form, ſo readily induce ſickneſs, and they uſually prove more effectual in relieving pain.

In ſeveral inſtances, where no great advantage

was derived from all the quantity of laudanum that durſt be given by the mouth, patients have been kept eaſy by a grain or two of opium diſſolved in a ſmall quantity of mucilage, and thrown, from time to time, into the rectum.

Where this diſeaſe occurs in ſcrophulous conſtitutions, an occurrence by no means uncommon, hyocyamus, cicuta, and ſea-bathing, are the remedies uſually employed; and although they do not often accompliſh a cure where the gland is much ſwelled, yet they frequently afford relief; and ſlighter degrees of the diſeaſe have, in ſome inſtances, been removed by them entirely.

Some practitioners, as I have already had occaſion to remark, give mercury in every variety of Gleet, but I have never known any advantage derived from it, and where the proſtate gland is affected it very commonly does harm.

As I have mentioned above, that in Gleet proceeding from ſtrictures in the urethra, ſome ſlight degree of ulceration takes place, it may be imagined that mercury ought in ſuch inſtances to prove uſeful, from its well known powers of healing venereal ulcers. It is not, however, found to promote the cure of theſe ulcerations; a circumſtance that may be conſidered as a farther proof of the difference between Gonorrhœa Virulenta and Lues Venerea; for if affections of this kind were induced by the matter of Lues Venerea, mercury would ſeldom fail in curing them, while no other remedy would ever prove ſucceſsful. But, inſtead of this, I have repeatedly found, that no advantage is derived from mercury in the treatment of this ſymptom, while bougies, when properly managed, very commonly prove effectual.

What we have hitherto ſaid upon the ſubject of Gleets relates chiefly to the diſeaſe as it occurs in men, it being in them both more frequent, and of much more difficult treatment than it uſually is in women.

We often meet with it, however, in women; but it is proper to remark, that it is equally difficult to diſtinguiſh it from fluor albus, as in a former ſection we have obſerved Gonorrhœa to be. Referring to what was then ſaid upon the means of diſtinguiſhing between the two diſeaſes, we ſhall at preſent proceed ſhortly to obſerve, that in women we depend entirely for the cure of Gleet upon a proper perſeverance in the uſe of injections. When after a due continuance of ſuch as we reckon aſtringent *, if the diſcharge ſtill continues, thoſe of a ſtimulating nature ſhould be employed, particularly Nos. 24 and 25.

When the diſeaſe is ſeated in the vagina, as is generally the caſe, theſe injections may be thrown up with freedom; but when the diſcharge proceeds from the urethra they ought, on account of the contiguity of the bladder, as we had occaſion to remark in a former ſection, to be thrown up with much caution.

In women I have ſometimes found that a Gleet has proceeded from ulceration within the verge of the vagina. In ſuch inſtances injections have little or no influence; and as ſores of this kind are commonly connected with Lues Venerea, they can only be cured by a courſe of mercury.

It is proper, however, to remark, that women are liable, as men are, to excoriations from the acrimonious nature of the matter of Gonorrhœa. A diſcharge of matter from this cauſe will be moſt readily cured by aſtringent injections, or bathing the parts with lime-water, or a ſaturnine ſolution.

I have never known the real venereal ſtricture occur in women. Excreſſences form in the urethra from other cauſes; but ſtricture from Gonorrhœa muſt neceſſarily, in this ſex, be a rare occurrence. If it is ever met with, bougies muſt here, as in men, be depended upon for a cure.

* Vide Appendix, Nos. 18, 19, and 20.

SECT. III.

Of Impotency from Seminal Weakneſs.

WE here mean by impotency a deprivation of the power of propagating the ſpecies.

This may proceed from various cauſes; but it is that variety of it only which is uſually ſuppoſed to ariſe from weakneſs in the ſeminal veſſels that we are now to conſider.

It is an occurrence which, in young people, either in idea or reality, takes place daily; and as it proves at all times a ſource of much anxiety and diſtreſs, it neceſſarily becomes a frequent object of attention to practitioners. A degree of debility inducing want of retention in the ſeminal veſſels is, no doubt, occaſionally met with; but the ſtrong deſire which Nature has wiſely implanted in all men to be complete and entire, in whatever relates to the propagation of his ſpecies, is often, in early youth, the cauſe of much ill-founded ſuſpicion on this point, and of circumſtances reſpecting it being conſidered as real which never took place.

Thus there is nothing more common than young people ſuppoſing they are week and debilitated, on perceiving an oozing of mucus from the urethra, or a diſcharge of ſemen when at ſtool. The firſt, however, is natural to many when in full health, and where no ſuſpicion of weakneſs exiſts; and the latter, or a diſcharge of ſemen, muſt at all times be the conſequence of hardened fæces compreſſing the veſiculæ ſeminales, when theſe veſſels are full of ſemen. But ſuſpicion on this point being once awake, it is often difficult, and ſometimes impoſſible, to remove it; inſomuch that many have been rendered miſerable by this alone, where no veſtige of diſeaſe exiſted.

It is conſidered as one of the moſt certain proofs of weakneſs in the ſeminal veſſels when a diſcharge of

ſemen inſtantly ſucceeds to an erection, or, perhaps, to an imperfect degree of it. But this may alſo happen from a ſtate of over-excitement in the other parts of generation, and I alſo believe that it often occurs from the ſeminal fluid being collected in too great quantity in the viſiculæ ſeminales. I have reaſon indeed to imagine, as will appear in the ſequel, that this is the moſt frequent cauſe of all ſuch affections.

It may be ſaid, if the diſeaſe exiſts, and the patient is rendered completely impotent, that the cauſe of his being ſo is a point of little importance. It will appear, however, that this is by no means the caſe; for while real impotency is in a great proportion of caſes to be conſidered as incurable, we have it in our power, perhaps, in moſt inſtances of approach to this ſtate, to accompliſh a cure.

In the laſt ſection we have ſeen that Gleet proceeds at one time from an affection of the glands in other parts of the urethra, but in ſome caſes that it ariſes from a ſwelling of the proſtate gland. When this exiſts for any length of time, we find that not only the duct of the proſtate gland becomes weak and relaxed, but that a loſs of tone takes place in ſome of the contiguous parts, particularly in the excretory ducts of the veſiculæ ſeminales; inſomuch that a great proportion of all who have long laboured under Gleet from affections of this gland, have likewiſe been liable, in ſome degree, to ſeminal weakneſs. It is well known that long continued Gleets, are often the cauſe of Impotency. For the moſt part, it is ſuppoſed, that this happens from the general debility which they induce. In ſome inſtances this may be the caſe; but I have much reaſon to think that they act much more frequently by inducing a local weakneſs only in the parts deſtined for the reception of the ſemen. This I conclude to be the caſe from this kind of debility taking place where there is no appearance whatever of general weakneſs, for inſtances often occur in conſtitutions apparently firm and healthy, of ſuch degrees of weakneſs in the ſeminal organs, that emiſſions take

place, not merely from partial erections and lascivious ideas, but from the ordinary friction applied to the penis in riding and walking, and, in some instances, from the effect of heat alone, whether excited by wine, exercise, or sitting near a fire.

In people who have suffered much from frequent returns of Gonorrhœa, particularly where Gleet has taken place from the cause I have mentioned, I have known several instances of the semen running off by the slightest application of any of the causes just enumerated.

The local weakness thus induced in these parts by Gleet seems very much to resemble the effects of Onanism; a habit so baneful to many of our youth, that I believe it to be more destructive in its consequences than a great proportion of all the diseases to which in early life they are liable. Were it to prove hurtful to those only whose self-indulgence gives rise to it, there would be less cause to regret the effects of it; but, besides rendering the parent himself miserable, it evidently entails the highest distress upon posterity, by generating languor, debility and disease, instead of that strength of constitution, without which there can be no enjoyment.

Some, I know, have entertained a different opinion upon this point, and imagine that no bad effects are to be dreaded from the habit of which we are now speaking *. But this is so directly contrary to the experience of others, and I have had so many instances in the course of my own practice of constitutions being irretrievably ruined by indulgence in it, that I cannot avoid, in the strongest manner, giving my opinion of it: nor does it appear that any benefit could result to society from a contrary opinion being admitted, even allowing it to be well founded; for although no immediate harm might ensue from it to the constitution, it ought to be discouraged as unnatural, and from its tending to divert the attention

* Vide Treatise on the Venereal Disease, by John Hunter chap. xii.

from an enjoyment of a much ſuperior kind. While, therefore, there is much cauſe to conſider the practice as highly dangerous to all who follow it, and while ſuch a propenſity prevails towards it in that early age when boys cannot form a judgment of its deleterious tendency, I conſider it as incumbent on thoſe who write upon it to paint it and the baneful effects which reſult from it in their true and proper colours.

In the treatment of this variety of Impotency, whether it has been induced by Onaniſm, or whether it be the conſequence of Gleet, it is proper to diſtinguiſh it into two ſtages. The one, ſo far as I have ſeen, being of a nature that does not admit of any certain remedy, while the other may, in moſt inſtances, be completely cured. Many conſider it ſo certainly as incurable that the patient is led to deſpair from the firſt approach of it, and the opinion is often unfortunately realized merely from the cauſe I have mentioned, our not diſtinguiſhing the two ſtages of the diſeaſe, and allowing that which I ſuppoſe may be eaſily removed, to proceed without any attempt for this purpoſe, to that ſtate of it, which, in moſt inſtances, may be conſidered as incurable.

Practitioners are frequently applied to by young men labouring under what I ſhall term the firſt ſtage of Gleet; who, finding that a ſeminal diſcharge takes place from the ſlighteſt cauſes, perhaps merely from their being in company with women; from laſcivious dreams; or from the parts of generation being in any degree overheated, begin to be afraid that they ſhall never again have the power of retention, and conclude therefore that they cannot with propriety enter into a matrimonial connection. We often find that they admit Onaniſm to have been the primary cauſe of their diſtreſs, although, for a great length of time, perhaps for a number of years, they aſſert, and with no reaſon on our part to doubt them, that they have been entirely out of the practice of it.

In this ſituation, whatever may be the appearance

and habit of body of the patient, ſtrengthening aſtringent remedies are preſcribed, ſuch as bark, ſteel, balſam of copaiba, cold bathing, &c.; and whatever are his views, he is adviſed to avoid matrimony and all veneral intercourſes.

In a great proportion of caſes, however, I am convinced that this practice and this advice are erroneous. Following the bulk of practitioners, I eaſily adopted them; but no good reſulting from them I have long ſince relinquiſhed them, and I have ſeldom failed of ſucceſs by adviſing meaſures of an oppoſite nature.

In a great proportion of all that are injured by this deſtructive habit, a morbid irritability of the organs of generation ſeems to be excited. By this a greater quantity of the ſeminal fluid is ſecreted than the veſiculæ ſeminales can retain: in conſequence of which, it either burſts out during nocturnal dreams, or is eaſily excited to flow by the application of any of the cauſes above-mentioned.

Even after the habit has been long left off I have known the effects of it continue in a very diſtreſsful degree, and I conclude that they proceed chiefly from too plentiful a ſecretion of ſemen, from the nature of the remedy which in moſt inſtances has proved ſucceſsful.

Inſtead of adviſing abſtinence from women, I always inculcate as frequent connection as natural deſires ſeem to require; and when matrimony is in view, inſtead of being afraid of it, as often happens with this claſs of patients, from a fear of their not performing the functions of it properly, I uniformly hold it forth as the moſt certain remedy.

The idea of inability is ſo ſtrongly prevalent with many, that they are with difficulty prevailed upon to make the attempt; but the effects of it are ſo certain, that with patients in ſuch circumſtances as we are now conſidering, it may always be adviſed with the greateſt confidence of ſucceſs. Nor is the aſſiſtance of other remedies required in this plan of cure;

at leaſt in various inſtances, patients, who, for many years together had been almoſt conſtantly taking ſuch remedies as they judged to be of an invigorating nature, without any advantage reſulting from them, and who therefore were induced to conſider their complaints as incurable, have, on laying all of theſe aſide, become completely and entirely well in the ſpace of a few weeks after marriage. The irritability of the organs was thus diminiſhed; the morbid increaſe of the ſecretion was removed; and the ſeminal receptacles, not being over diſtended, were ſoon found to be endowed with a ſufficient degree of retention.

This being a very frequent variety of the diſeaſe, I can ſpeak of it, and of the remedies employed in it, with ſome degree of certainty; and I can with confidence ſay, that none of thoſe commonly adviſed have ever, in the courſe of my obſervation, had any obvious influence; while the plan I have pointed out, very generally ſurpaſſes in its effects all that the patient could hope from it.

When a ſwelled ſtate of the proſtate gland is connected, as I have ſometimes found, with this variety of the diſeaſe, it neceſſarily renders the event more doubtful, and the effect, even of this and every other remedy, more uncertain. But even here the courſe I have adviſed will ſometimes prove ſucceſsful. It will not remove any affection of the gland, but where the diſeaſe of that organ is not in a great degree, it proves equally effectual in removing the other, as if the gland was entirely ſound; and this obviates one of the greateſt ſources of miſery to the patient.

It may be ſaid, that while this or any other variety of Gleet exiſts, the remedy I have pointed out cannot with any propriety be adviſed, from the riſk of communicating infection. We know, however, that real Gleet does not communicate infection to others; and the means of diſtinguiſhing it from Gonorrhœa are by no means equivocal. Many in-

ſtances have fallen within my own obſervation, and others muſt often meet with it, of this being clearly the caſe. I know, at this time, ſeveral inſtances of men who have been married for many years, who, during the whole period, have laboured under different varieties of Gleet, and who have never communicated the diſeaſe either to their wives or children. Gleet in men ſeems to be equally uncapable with fluor albus in women to communicate infection.

In that ſtage of the diſeaſe which we have juſt been conſidering, a cure, we obſerve, may, perhaps, in every inſtance, be accompliſhed. But when it has been of ſuch duration as to form what may more properly be termed ſeminal weakneſs, and what I ſhall term the ſecond ſtage of the diſeaſe, a very different proſpect preſents itſelf. The patient may even, in very advanced periods of the diſeaſe, derive advantage from a well-regulated diet and other circumſtances, by which his ſituation will be rendered much more comfortable than it otherwiſe would be; but in this ſituation a complete removal of the diſeaſe is ſcarcely to be expected: at leaſt little dependence is to be placed upon the remedies uſually employed for that purpoſe.

This very diſtreſsful ſtage of ſeminal weakneſs is often the conſequence of Onaniſm long perſiſted in; and it is, as we have remarked, the frequent conſequence of Gonorrhœa and Gleet. In all ſuch caſes the diſeaſe ſeems to proceed from real weakneſs, or debility in the excretory ducts of the veſiculæ ſeminales; for it commonly happens where the whole ſyſtem is much relaxed and emaciated; where there is therefore no cauſe to imagine that it can ariſe from too plentiful a formation of ſemen; and of which, indeed, we often meet with a very deciſive proof, from conſtant mucous-kind of oozing being perceived in the urethra, while no ordinary cauſe of excitement is capable of producing any regular diſcharge or emiſſion of ſemen.

In this ſituation a variety of remedies are employed, chiefly with a view to reſtore and invigorate the tone of the weakened parts; ſuch as bark, ſteel, balſamum copaiba, and cold bathing. At other times, where the diſeaſe is ſuppoſed to proceed from a deficiency of ſemen, provocatives are preſcribed; ſuch as high ſeaſoned foods, all the terebinthenate balſams, and cantharides. But although I have had many opportunities of obſerving a complete trial of theſe, I never knew any advantage derived from them. The only courſe, which in ſuch circumſtances I ever knew prove uſeful, was ſuch as merely tended to reſtore the patient to his uſual ſtate of health. If Onaniſm has induced the diſeaſe, nothing will afford even the chance of a recovery till this is left off. Whatever may have been the cauſe of it, he ought to be put upon a nouriſhing diet; and he ſhould live in an elevated, dry ſituation. Sea-bathing ſhould be adviſed; and coſtiveneſs, with every thing that might tend to irritate the parts chiefly affected, ſhould be avoided.

With a view to leſſen that degree of irritability with which this diſeaſe is uſually connected, opiates have been adviſed; but although I have often given them a full trial, I never knew any real advantage obtained from them. On the contrary, they have often appeared to do harm; for although they procure reſt, yet the ſleep which they give is always diſturbed; the patient awakes in a ſtate of more anxiety and diſtreſs than he experienced on going to bed; and when opiates are habitually uſed, coſtiveneſs can ſcarcely be prevented by means of remedies, which, in this ſituation, ought not to be given.

Hemlock is often uſed here; but I have never known any obvious advantage derived from it. Hyocyamus, by acting as an anodyne, while it does not produce coſtiveneſs, has, in different inſtances, appeared to prove ſerviceable. One grain of the extract may be given at firſt, and the doſe increaſed in a

gradual manner to three, five, ſix, eight, and even ten grains.

Conceiving, from ſome circumſtances connected with the diſeaſe, as well as from many of the ſymptoms which enſue from it, that it may in ſome inſtances be of the ſame nature with paralyſis, I have, in ſeveral caſes, adviſed electricity, and in one or two of theſe it appeared to prove ſerviceable, but never ſo decidedly as to enable me to ſpeak of it with confidence.

SECT. IV.

Of Obſtructions in the Urethra from Gonorrhœa Virulenta.

WHEN ſpeaking of Gleet we had occaſion to obſerve that it is often the conſequence of Obſtructions in the Urethra. But Gleet, although the cauſe of ſome inconvenience and diſtreſs, is by no means the ſymptom of moſt importance with which Obſtructions are accompanied. Strictures may take place in a certain extent, without giving much uneaſineſs, but whenever they arrive at ſuch a height as to impede the flow of urine, they prove always the cauſe of diſtreſs and miſery to the patient, and of much embarraſſment to the practitioner.

Obſtructions proceeding from Gonorrhœa Virulenta may be reduced to four general heads; tumours in the ſubſtance of the urethra and contiguous parts; ſpaſmodic affections of the urethra; caruncles, or fleſhy excreſcences, in the urethra; and ſtrictures, properly ſo called.

§ I

Of Tumours in the Subſtance of the Urethra and contiguous Parts.

WE have already had occaſion to ſpeak of Tumours, or ſwellings of the proſtate gland, of ſwellings of Cowper's glands, and of the other ſmaller glands of the urethra. All of theſe produce obſtruction to the flow of urine whenever they become of ſuch a ſize as to diminiſh, in any degree, the magnitude of that canal.

Referring to what has already been ſaid upon this part of our ſubject, I have at preſent to obſerve, that in the commencement of all Tumours in theſe parts, we ought, by every method in our power, to endeavour to remove them by diſcuſſion, for which purpoſe local and general blood-letting are the remedies chiefly to be depended on; and as theſe, when carried a ſufficient length, and when aſſiſted by a cooling regimen, and the external uſe of cold ſaturnine applications, ſeldom fail in removing them, they ſhould always be perſiſted in as long as there is the leaſt chance of their proving ſerviceable. For although tumours in this ſituation are often eaſily removed after ſuppuration has taken place, by the matter being freely diſcharged, and the ſore treated in the uſual way, yet, before arriving at this ſize, a good deal of diſtreſs always occurs from them, and, in ſome inſtances, the ſores heal with difficulty, while in others the matter burſts into the urethra, where it continues often during the life of the patient to excite a great deal of diſtreſs.

In others again it burſts into the ſcrotum, and from thence into the ſurrounding cellular ſubſtance, and openings forming in conſequence of this, commonly between the ſcrotum and anus, a very trou-

bleſome diſeaſe is thus produced, termed fiſtula in perineo*.

It is therefore obvious that it is much for the advantage of the patient that all tumours of this kind ſhould be removed by diſcuſſion; but when our endeavours for this purpoſe do not ſucceed, and when ſuppuration takes place, we have it often in our power to prevent many of the bad conſequences which otherwiſe are apt to enſue. By opening ſuch tumours immediately on matter being perceived in them, we prevent the riſk of their burſting into the ſcrotum and urethra, ſo that in this ſituation we ought never to wait till they are ſo fully matured as otherwiſe might be proper: and when once they have come ſo far as to render it proper to diſcharge the matter, it ought to be done, as we have formerly obſerved, by making an opening the whole length of the tumour. This prevents the matter from lodging, and from inſinuating into the contiguous parts, while the ſores which enſue heal more kindly than they uſually do when ſmaller openings have been made.

Among other conſequences which ſometimes occur from matter burſting from abſceſſes in this ſituation into the contiguous parts, it is proper to mention that the moſt diſtreſsful effects occur from its finding acceſs to the corpus cavernoſum of the penis. It uſually ſpreads ſuddenly over the whole ſubſtance of the penis; ſmall openings take place in different parts of the ſwelling, at which the matter is diſcharged; and theſe are always very difficult to heal: or, if the matter does not find a vent in this manner, it either burſts into the urethra, or the ſurrounding parts are apt to mortify.

When mortification occurs in this ſituation it either ſoon proves fatal, or terminates in the entire loſs of the penis; for a ſtop is ſeldom put to the diſeaſe till all the parts ſurrounding the urethra are deſtroyed, when amputation of the remainder becomes unavoidable. Indeed the hæmorrhagy which is apt to

* For treatment of this, vide ſyſtem of ſurgery, chapter xv.

occur from deep ſeated mortification of the penis is commonly of itſelf a ſufficient motive for amputation being adviſed, for we can ſeldom put an effectual ſtop to the diſcharge till the mortified parts are all removed.

For preventing mortification in this ſituation from ſpreading, opium has been recommended. I have certainly obſerved it prove uſeful in gangrene, both in theſe parts and in others; but more dependence is for the moſt part to be placed upon a plentiful uſe of bark. Whether or not opiates act in the cure of gangrene as anteſeptics, is not, or, perhaps, cannot be aſcertained. I rather believe that they do not: and I am inclined to think that they prove ſerviceable only by allaying irritation. In this manner they may be employed with advantage wherever gangrene appears to be the conſequence of a high degree of inflammation. By leſſening or removing pain they may diminiſh the cauſe of exertion in the veſſels of the part affected, and may thus tend to prevent mortification from extending ſo far as it otherwiſe might do; but I have never known them to prove uſeful where the diſeaſe ſeemed to depend upon the loſs of tone, either of the part itſelf, or of the conſtitution.

§ 2

Of Spaſmodic Obſtructions of the Urethra.

IRRITATION of the Urethra, from whatever cauſe it proceeds, has an evident effect in leſſening the diameter of the paſſage. Hence, in caſes of ſtone in the bladder, the irritation, and conſequent contraction of the urethra, is ſometimes ſo great that a ſtaff, even of a moderate ſize, cannot be introduced. Stones in the kidney have frequently the ſame effect. Nay, I have known this contraction of the urethra induced by ſand paſſing along the ureters. In like manner the irritation produced in the urethra by Gonorrhœa, is in ſome caſes ſo great as to excite con-

traction of the paſſage in a very diſtreſsful degree. I have known the urine ſo completely obſtructed by this alone, as to give cauſe to ſuſpect that ſtrictures were formed of the moſt alarming nature; in which neither ſtaff, catheter, nor bougie, could be introduced, but with more force than can ever with ſafety be applied.

We judge that obſtruction proceeds from this cauſe, when at one time it occurs in a ſevere degree, and ſoon thereafter, perhaps in the ſpace of a few hours, it appears to be entirely or nearly gone. Of this I have met with various inſtances; in which, from the anxiety of the patient, and from ſuſpicion of a more inveterate kind of ſtricture, repeated attempts have been made in vain to paſs a bougie, and in which the ſtoppage has gone off entirely upon the exhibition of a doſe of laudanum, or rubbing the perineum with anodyne balſam.

As the urethra itſelf does not appear to be muſcular, as a ſmall portion of it only can be compreſſed by the muſcles of the penis, and as the obſtruction of which we are now ſpeaking occurs in parts of the paſſage where theſe muſcles do not exiſt, it has been imagined that this temporary acceſſion of ſtricture muſt be owing to ſome other cauſe. It may perhaps happen that the violent irritation excited by chordee may in ſome inſtances produce ſuch effuſion into the cellular parts of the penis as may compreſs the urethra; and that this may ſoon be removed by abſorption, on the irritation by which it was produced being taken away. But although this may be the caſe in a few inſtances, I am convinced that it is not a frequent occurrence, and that the urethra itſelf is endowed with a contractile power, by which, for the moſt part, this kind of obſtruction is produced.

Were it to proceed from any kind of effuſion compreſſing the urethra, the tumefaction thus produced would be obvious. Partial circumſcribed tumours would either be diſcovered in the courſe of the urethra, or the whole body of the penis or a conſiderable part of it, would be ſwelled. We do not find,

however, that this is apt to happen; at leaſt, in moſt caſes of this kind no tumefaction of the penis is perceptible.

This kind of ſpaſm or cramp occurs occaſionally in every part of the urethra. I have met with it within an inch of the extremity of the glans, but for the moſt part it happens behind the ſcrotum, or nearer the proſtate gland, in the membranous part of the paſſage.

In the treatment of Obſtruction in the Urethra it is a matter of the firſt importance to determine the cauſe by which it is produced. It is particularly neceſſary to diſtinguiſh between obſtruction ariſing from ſpaſm, and that which proceeds from ſtricture of the paſſage. In the latter, bougies, as we ſhall afterwards ſee, are almoſt the only remedies upon which we can depend, while, in caſes of ſpaſm, they very commonly do harm. In the one they remove the diſeaſe by acting as wedges; in the other they add to the violence of the contraction by increaſing the irritability by which it was at firſt excited.

As the degree of obſtruction produced by ſpaſm alone is, in ſome inſtances, equal to what uſually occurs from the moſt obſtinate kind of ſtricture, it is only from an exact account of the riſe and progreſs of the diſeaſe by which we can judge of the difference.

When the flow of urine has at firſt been perceived to be ſlightly obſtructed, and when this has gradually become worſe, without ever being in any inſtance materially better, there will be much cauſe to imagine that it proceeds from a cauſe of a fixed nature: while, on the contrary, however complete an obſtruction may be, if it came on ſuddenly, and if it frequently becomes quickly well without any obvious reaſon, there will be no cauſe to doubt of its proceeding from ſpaſm.

We find too, in obſtruction proceeding from cauſes of a more fixed nature, that ſome pain is always diſcovered at one or more fixed points. In ſome caſes a degree of hardneſs is perceived on the urethra being

preſſed at theſe points; while in others, although nothing can be diſcovered on external preſſure, the patient feels a degree of heat and pain, as if the parts affected were excoriated, or even ulcerated. Beſides, in real ſtricture, a diſcharge of matter very univerſally takes place from the urethra; forming, as we have already had occaſion to ſee, a very frequent cauſe of Gleet. But in obſtruction proceeding from ſpaſm, any pain which occurs in the urethra does not proceed from one point. It appears to be more diffuſed; and is ſeldom in any diſtreſsful degree, if it be not by the ſtoppage which it gives to the flow of urine. No particular ſpot is diſcovered to be hard or ſore upon preſſure, and a diſcharge of matter does not neceſſarily take place in it.

Spaſm, indeed, may be accompanied with a flow of matter from the urethra. This will always happen where Gonorrhœa or Gleet have previouſly exiſted; but it will never, on enquiry, be found to be the cauſe of the diſcharge.

The remedies to be employed for the removal of this variety of obſtruction are, warm emollients, anodynes, blood-letting, bliſters, and electricity. Bougies, in certain circumſtances, may be alſo employed.

Rubbing the parts affected, whether the perineum, or more interior parts of the penis with warm oil, proves ſometimes uſeful, Oil, ſtrongly impregnated with camphor, and Goulard's form of the unguentum ſaturninum, when applied warm to the parts affected, alſo tend to remove this cauſe of obſtruction. I have ſometimes known it inſtantaneouſly removed by fomenting the perineum with a decoction of chamomile flowers or althea, or by the application of a bladder filled with warm water.

The common anodyne balſam makes an uſeful application here. The parts in which the ſpaſm is ſeated ſhould not only be rubbed with it, but pledgets immerſed in it ſhould be kept conſtantly applied to them. But one of the moſt powerful antiſpaſmodics among external applications is, a mixture compoſed of three parts of laudanum and one of æther.

Frequently, however, little or no advantage is derived from the external application of anodynes; while opium, given internally, is productive of the beſt effects. Forty drops of laudanum, given by the mouth, will often remove a ſpaſm of the urethra that has reſiſted every variety of this remedy applied to the ſkin; and when thrown up the rectum, in the form of injection, it proves ſtill more effectual in removing pain, irritation, and ſpaſm about the anus, and in the organs of urine and generation, than when received into the ſtomach.

Whether this may proceed from the remedy getting more nearly into contact with the nerves of the diſeaſed parts, or whatever may be the cauſe of it, is perhaps difficult to determine; but, from much experience of their effects, I am convinced, that in all ſuch affections, opiates prove moſt powerful when given in this manner.

In plethoric conſtitutions blood-letting is often the moſt effectual remedy, not only in carrying off the ſpaſm which preſently ſubſiſts, but in preventing returns of it in future. Beſides the diſcharge of blood from the arm in quantities proportioned to the ſtrength of the patient, leeches ſhould be applied along the courſe of the affected parts, and they ſeldom fail where the conſtitution can ſupport the evacuation, of giving very effectual relief.

From an idea of ſpaſmodic affections proceeding in moſt inſtances from what is termed a weakneſs of nerves, and from a dread which very univerſally prevails, of all ſuch affections being rendered worſe by blood-letting, this is a remedy we find very rarely employed. But it is proper here, as well as in ſimilar affections of other parts, to obſerve, that morbid irritability may be excited by cauſes of a very oppoſite nature. It ſometimes takes place where the conſtitution is relaxed and reduced; and, in ſuch circumſtances, evacuations of every kind very commonly do harm. But it more frequently happens from a ſtate of plethora, in which blood-letting proves the

moſt certain remedy, and where opiates, warm bathing, and other antiſpaſmodics are often uſed for a great length of time, without any effect reſulting from them.

We find from experienee, that a ſtimulus applied to the ſkin proves often uſeful in relieving pain and ſpaſm, in parts that are very deeply ſeated; and upon trial, the ſame remedies are ſometimes found to remove ſimilar affections of the urethra. Obſtructions of this kind have, in different inſtances, been relieved by the application of volatile liniment, a ſtrong impregnation of oil with volatile alkali, to the parts affected. A bliſter applied over the perineum, has in different inſtances carried off obſtructions of the urethra; and in ſome caſes where bliſters failed, the diſeaſe has been completely removed by the application of a warm plaſter.

In ſuch caſes bliſters do not ſeem to act ſo much by the evacuation which they produce, as by the irritation which they excite; for it often happens that the pain and ſpaſm are removed as ſoon as the ſkin becomes in any degree uneaſy, and long before veſications can be formed. Hence, a warm plaſter, which does not contain ſuch a quantity of cantharides as to render it capable of acting as a bliſter, by keeping up a more continued ſtimulus than bliſters, proves, in ſome inſtances, more effectual.

Electricity has ſometimes proved uſeful in removing ſpaſm of the urethra; but it requires to be managed with caution, otherwiſe it is apt to add to the violence of the diſeaſe. In plethoric habits it always does miſchief, and ought never to be adviſed in theſe till blood-letting has been premiſed.

I have had occaſion already to remark, that in this variety of obſtruction, bougies are very apt to do harm. This proceeds from their being puſhed with violence, when the parts, from being under ſome high degree of irritation, are in a ſtate of ſtrong contraction. This ought never, therefore, to be done; for

while the parts remain in this ſituation we ſeldom ſucceed; or if we do get the bougie paſſed, it is always from the uſe of more violence than ought to be employed.

But bougies prove highly ſerviceable, even in Spaſmodic Obſtructions of the Urethra, when the violence of the diſeaſe is ſo far removed that they can be introduced with eaſe, and without exciting irritation: ſo that, whenever we find this can be accompliſhed, whether the ſpaſm has been leſſened by the uſe of emollients, anodynes, blood-letting, or any other remedy, it ought always to be adviſed. Beſides the preſent relief which it affords, by removing any degree of the obſtruction which may remain, it tends more effectually than any other remedy to prevent a return of it. This is particularly the caſe where ſpaſm is conjoined, as ſometimes happens, with the more fixed kind of obſtruction, which we are preſently to proceed to conſider. When this takes place all our other remedies are to be conſidered merely as preparative to the uſe of bougies, which, in ſuch circumſtances, are alone to be depended on for a cure. It muſt always be remembered, however, that bougies are only admiſſible when they can be introduced and retained in the paſſage, without exciting much uneaſineſs.

In all diſeaſes of the genitals the ſtate of the inteſtines require particular attention. So much ſympathy ſubſiſts between theſe parts that in people liable to obſtruction in the urethra, I have known a ſevere fit of the diſeaſe induced by a coſtive ſtool. Neither is much purging neceſſary or proper. The bowels ſhould be kept in ſuch a ſtate as to prevent irritation, as far as it can be done, in the rectum and contiguous parts.

§ 3

Of Obſtructions in the Urethra from Fleſhy Excreſcences, or Caruncles.

OBSTRUCTION to the paſſage of urine has long been conſidered as one of the moſt diſtreſsful, as it is one of the moſt frequent conſequences of Clap; and Caruncles, Fleſhy Excreſcences, or Carnoſities, as they are ſometimes termed, are mentioned by all the older writers upon this ſubject, as the moſt frequent cauſe of it.

This idea naturally aroſe from their perceiving that warty ſubſtances were ſometimes formed within the urethra, near to its extremity, ſimilar in appearance to thoſe which often occur upon the prepuce and glans; and not proſecuting the ſubject by opening the parts after death, they were led to ſuppoſe that the more deep-ſeated obſtructions were all of a ſimilar nature.

So univerſally did this opinion prevail, and it was ſo ſtrongly aſſerted in books, that although it was long ago, by ſome individuals, particularly by Saviard and Dionis, ſuppoſed to be ill-founded, yet even in our times it has been very generally admitted. This is ſo far the caſe, that in common converſation upon this ſubject, Caruncles are uſually conſidered as the moſt frequent cauſe of all ſuch obſtructions.

It is now, however, very certainly known that this cauſe of obſtruction is an uncommon occurrence in the more remote parts of the urethra. Of late years this has become a very frequent object of anatomical inveſtigation; and I have reaſon to ſuppoſe, from all that I have yet heard, as well as from the reſult of my own inquiries, that it ſeldom exiſts farther up the urethra than half an inch or ſo from the point of the glans. Warty excreſcences are not unfre-

quently found towards the orifice of the urethra; but I have ſeldom ſeen them, even in this ſituation, where they did not likewiſe prevail upon the glans and prepuce.

The obſtruction to the flow of urine from this cauſe is ſeldom conſiderable; but it always occaſions much anxiety to the patient, from a fear which he is apt to entertain of its becoming worſe.

When ſeated juſt in the opening of the urethra, as ſometimes happens, I have, in different inſtances, been able to remove them with ſciſſars, and with ſmall ligatures paſſed round them; but they are ſeldom ſo ſituated as to admit of our taking them off in this manner. Neither are we at liberty to deſtroy them by the application of eſcharotics, the irritability of the urethra rendering this a very hazardous attempt.

In all ſuch caſes we place our chief dependence upon bougies; and, when duly perſiſted in, they ſeldom fail in effecting a cure.

Some difference of opinion has ariſen as to the manner in which bougies act in removing theſe excreſcences. In ſtrictures of a different kind there is no cauſe for doubt upon this point, as they evidently act entirely as wedges, and prove uſeful in proportion to the extent of mechanical preſſure which they afford; but in the cure of Caruncles they have been ſuppoſed to act chiefly by inducing ſuppuration upon the diſeaſed parts, and diſſolving them in this manner.

It is obvious, however, that in the cure of theſe excreſcences, there is ſomething farther neceſſary than the formation of matter. Indeed inſtances occur daily, of their being conſtantly immerſed in matter, ſometimes proceeding from their own ſurfaces, and at other times from the contiguous parts, without their being diminiſhed. I rather conceive that bougies, even in this variety of obſtruction, operate partly by mechanical preſſure, and partly by exciting inflammation in the excreſcences. We

ſhall hereafter have occaſion to ſee, that ſome of the remedies employed for the removal of warts in other parts, prove chiefly uſeful by making them inflame; and as bougies are well calculated for this purpoſe, I think it probable, that while they evidently anſwer a good purpoſe by the preſſure which they afford, they prove likewiſe ſerviceable by exciting over theſe excreſcences that ſlight degree of inflammation, which, in the treatment of common venereal warts very commonly makes them drop off.

§. 4.

Of Obſtruction in the Urethra from Strictures, properly ſo called; of Bougies, and Fiſtulæ in Perineo.

IN the more fixed kinds of Obſtruction, proceeding from Gonorrhœa, the diameter of the Urethra is leſſened in two different ways. For the moſt part it is diminiſhed by a thickening taking place at ſome particular point in the membrane of the paſſage itſelf or rather in the corpus ſpongioſum urethræ, in a ſimilar manner to what frequently happens in the membrane of the noſe in caſes of catarrh. At other times the urethra is drawn together, or contracted, as if a cord was tied round it, without any other diſeaſe being perceptible.

In ſome caſes, again, theſe two affections are conjoined; and we find, in the ſame perſon, the diameter of the paſſage leſſened in one part by a mere contraction, and in another, by a ſwelling and thickening in the ſubſtance of the urethra itſelf.

Every part of the paſſage is liable to ſtrictures; but they are more frequent behind and immediately above the ſcrotum, than in any other part. In ſome caſes a ſingle ſtricture only takes place; but when the diſeaſe has ſubſiſted for a length of time, we very commonly find the paſſage contracted in different parts.

Where the urethra is merely drawn together, the diſeaſe ſeldom extends, at any one part, above the eight part of an inch, but where the ſtoppage proceeds from a ſwelling of the ſubſtance of the urethra itſelf, it ſometimes extends to the length of an inch.

From whatever cauſe the ſtricture may proceed, we commonly find that the urethra is affected equally all round; but it is very properly remarked by Mr. Hunter, that, in ſome caſes, the diſeaſe ſeems to be fixed entirely on one ſide of the paſſage, in which caſe the canal is thrown over to the oppoſite ſide.

This ſeems to happen only where the obſtruction is produced by ſwelling of the urethra, and not where it proceeds ſolely from contraction.

Where this unequal diminution of the canal takes place, even in one part only, it is obvious that it muſt add greatly to the difficulty of introducing bougies; and where more than one affection of this kind occurs, if they be not exactly oppoſite to one another, a kind of twiſting of the paſſage takes place, which renders the paſſing a bougie impracticable. It muſt, however be admitted, that inſtances of this are rare.

It is ſomewhat remarkable that the formation of ſtrictures is often ſo gradual, that a patient is not ſenſible of their taking place till the diſeaſe has been of long continuance. Being ſeldom attended with pain till the flow of urine is much impeded, any partial degree of it paſſes without notice, by which they are apt to be rendered much more fixed and permanent than otherwiſe they would be. The patient, indeed, has ſeldom any ſuſpicion of ſtrictures, till the ſurgeon, for his own ſatisfaction, where Gleet continues more obſtinate than uſual, propoſes to introduce a bougie. Gonorrhœa having given riſe to the Gleet, any difficulty that occurs to the paſſage of the urine is conſidered to ariſe from the ſame cauſe; and thus a great length of time often elapſes before any ſuch examination is made as can with certainty lead to a diſcovery.

This proves often, in its conſequences, highly diſtreſsful, and ought therefore to be as much as poſſi-

ble guarded againſt ; for ſtrictures, by long continuance, become much more firm, as well as more extenſive, than they were at firſt, by which they become much more difficult to cure. Caſes which at firſt would have yielded almoſt to the firſt attempt with bougies, are, by delay, often rendered ſo obſtinate that nothing will remove them but the moſt exact application of bougies being continued for a great length of time.

In all caſes, therefore, in which there is the leaſt cauſe to ſuſpect that ſtrictures may exiſt, an examination ſhould be made with bougies. But as patients themſelves are apt to be deceived upon this point practitioners ought, in every inſtance, to lead their attention towards it. In different parts of this work we ſhall have occaſion to ſee that Gleet is frequently kept up by ſtrictures ; ſo that whenever a running becomes in any unuſual degree obſtinate, if there be not ſome other evident cauſe for it, a trial with a bougie ſhould be propoſed. This, however, is ſeldom attended to ; by which much unneceſſary trouble, as well as loſs of character, falls upon the practitioner, while the patient is made to ſuffer a great deal of miſery which might have been prevented.

We have already had occaſion to remark that the ſtrictures of which we are now ſpeaking are conſequences of Gonorrhœa ;but in what manner they are produced by Gonorrhœa is perhaps difficult to explain. They have been attributed chiefly to ulcers induced by the diſeaſe, and to inflammation,

At one period I was induced to ſuppoſe,chiefly from the information I had from books, that ſtrictures were in moſt inſtances produced by ulcers. But from more frequent opportunities of obſerving the ſeat of Gonorrhœa after death, I am now convinced that ulcers very ſeldom take place here, by no means ſo frequently as ſtrictures, the diſeaſe they are ſuppoſed to produce. It ſometimes indeed happens, that the membrane of the urethra covering ſtrictures, is found in a ſtate of tenderneſs, or of excoriation, but not com-

pletely ulcerated. This appears too to be the effect of the diſeaſe rather than the cauſe of it, It ſeems to proceed, in ſome degree, from the tumefaction of the membrane of the urethra, which often occurs in ſtrictures and in ſome meaſure from the acrimony of the matter which theſe very ſtrictures produce.

When ulcers are met with in Gonorrhœ, they are in moſt inſtances, I believe, produced by the rupture, of one or more blood-veſſels. If it be not at the very point of the urethra, they never proceed from the matter of Lues Venerea. Now we can ſcarcely imagine that any ulcer which the rupture of a blood-veſſel in the urethra could probably produce, would be of ſuch depth or magnitude as to be attended with any important conſequence of this kind. Neither are hæmorrhages from the urethra frequent; nor have I found that ſtrictures have been particularly apt to happen, even where hæmorrhages have taken place in an alarming degree.

I conſider it, therefore, as decided, that ſtrictures in the urethra ſeldom or never proceed from ulcers. Inflammation, when violent, may certainly tend to produce them; and I think ſeveral inſtances have fallen within my own obſervation where this actually happened. I do not ſuppoſe, however, that this is ſuch a frequent cauſe of ſtrictures as is commonly imagined, nor do I agree with thoſe who think that injections often produce them.

As it was obſerved, that ſtrictures were, in ſome inſtances, induced by inflammation, and injections being ſuppoſed, by thoſe who are prejudiced againſt them, very apt to inflame the urethra, it was long ago aſſerted, and has ſince by many been believed, that they tend more frequently than any other cauſe, to produce ſtrictures. This, indeed, is held forth as the moſt important objection to the uſe of injections, and were it in any degree well founded, I admit that it would be a ſtrong reaſon for laying this remedy entirely aſide: for however deſirable it may be to have the running in Gonorrhœa quickly carried off, and

however efficacious injections may be, no practitioner would advise them were it to be with the risk of inducing such a formidable disease as strictures often are.

Where strong stimulating injections are ungardedly used, such a degree of inflammation may thus be induced as may be productive of the most obstinate strictures. But this is not the fault of the remedy, as I have elsewhere observed, being entirely the effect of an improper application of it. We might with equal propriety condemn the use of some of our most effectual and safest medicines, merely from an over-dose having done harm.

Instead of injections being a frequent cause of strictures, I have much reason to think that they are more effectual than any other remedy in preventing them. Although I have admitted that strictures are sometimes produced by severe degrees of inflammation, I do not consider this as a frequent occurrence. Strictures I conceive to be most frequently the consequence of a state directly the reverse of inflammation. In a great proportion of cases they will be found to take place, where, either from no injection being used, or from some other cause, the discharge has gone on to a very unusal length, where all symptoms of inflammation were gone long before, and where nothing but a Gleet remained. At least this has been very generally the result of my observation, and, I believe, it will be admitted by all who have paid attention to the point in question. I therefore conclude from this, as well as from the appearances which these parts exhibit on dissection, that this variety of obstruction proceeds most frequently from a state of morbid relaxation or debility, induced in these parts of the membrane of the urethra upon which the inflammation at first fixes with most violence, and from which the subsequent discharge is in a great measure produced.

Where stricture succeeds immediately to inflammation, it appears to be that variety of it in which the urethra is compressed, or tied, as it were, with a cord: but where it does not appear till the inflammation subsides, and the discharge has been of long duration, the substance of the urethra is found, at those parts where the

ſtrictures exiſt, ſpongy, ſoft, and prominent, bearing every mark of having completely loſt its tone.

The exiſtence of this variety of ſtricture being aſcertained, and it will not be confounded with any other diſeaſe where the obſervations contained in the preceding parts of this ſection are kept in view, our next object is to fix upon the method of cure.

While the opinion prevailed of ſtrictures being moſt frequently produced by ulcers in the urethra, as this led to the ſuſpicion of their being connected with Lues Venerea, mercury was adviſed in almoſt every inſtance. Mercurial ointment was regularly rubbed upon the ſeat of the diſeaſe, in order to diſſolve the cauſe of the obſtruction, and the patient was put under a ſalivation, with a view to the ſafety of his conſtitution.

As this was the prevailing practice of our beſt ſurgeons, both here and in other parts of Europe, when I entered upon buſineſs, I was neceſſarily led to adopt it; but late experience having ſhewn that mercury is never neceſſary in the cure of ſtrictures, I have now for many years paſt laid it altogether aſide. Nay, I readily own that I never knew any advantage derived from it, while in many inſtances, when long perſiſted in, it evidently did harm.

It will not be imagined, that during this late period of time, mercury was ever alone depended upon for the removal of ſtrictures in the urethra. Bougies were then very generally employed; but mercury, for the reaſon I have mentioned, was always adviſed along with them. Bougies had long been known to practitioners, but they were ſo coarſely formed, and their application ſo little underſtood, that ſcarcely any advantage was derived from them, till Mr. Daran, about fifty years ago, brought them into more general notice. By forming them with care, and introducing them with addreſs, Mr. Daran had the credit of giving us the only remedy upon which we can place any dependence for the cure of ſtrictures. At leaſt we are certainly in a great meaſure indebted to him for bringing them into general uſe.

It is true that Mr. Daran attributed virtues to his

bougies which they did not poſſeſs. Being much intereſted in the ſale of them, he wiſhed to throw a myſtery, over their compoſition. They acted chiefly, he ſaid, by their ſuppurative quality: in conſequence of which, and by the great diſcharge of matter which they produced, tumours, and other cauſes of obſtruction in the urethra, were, he alledged, diſſolved by them, which could never otherwiſe have been removed. The confidence with which this was aſſerted, by a man of Mr. Daran's experience, and the conſiderable diſcharge of purulent-like matter which uſually accompanies the uſe of bougies, gave weight to an opinion which at laſt came to be very generally adopted.

We now know, however, that it is not by exciting a diſcharge of matter that bougies act in the cure of ſtrictures. Even the mildeſt bougie we can employ, when kept in the urethra for an hour or two, is covered with a kind of matter on being withdrawn; but this happens as readily where the urethra is ſound as when it is obſtructed in various places, and it proceeds entirely from the natural mucus of the paſſage being increaſed in quantity, and ſomewhat altered in appearance, by the irritation excited by the bougie.

Even admitting the obſtructed parts to be more particularly acted upon, and a greater diſcharge of matter excited from them than from the other parts of the urethra, and which Mr. Daran aſſerted to be the caſe under his management of the bougie, ſtill this would not account for the removal of excreſcences; for we know, from daily obſervation, in other parts of the body, that the whole ſurface of excreſcences of a ſimilar nature to thoſe which Mr. Daran ſuppoſes to take place here, may be kept in a ſtate of complete ulceration, and a great quantity of matter diſcharged from them for a great lenght of time, without any diminution of their ſize.

Bougies, in the cure of theſe ſtrictures, ſeem to act ſolely by preſſure, and the ſupport which they afford to the diſeaſed parts. If a bougie, of ſufficient firmneſs, exactly or nearly the ſize of the urethra in its contracted ſtate, be paſſed at firſt, and others of a larger ſize af-

terwards introduced, we know from experience, that if done with caution, no harm will enſue, and that the ſtricture for which it was employed, will thus, in a gradual manner, be removed, merely by the preſſure of the bougie.

In this view, our chief object in the forming of bougies ſhould be, to give them a firmneſs ſufficient to afford ſupport to the parts which we wiſh to compreſs, and a ſmoothneſs and flexibility which will admit of their being introduced and retained in the urethra with the greateſt poſſible eaſe.

Numbers 34, 35, 36, and 37, in the Appendix, contain preſcriptions for bougies of different colours and conſiſtences, with ſome directions for the method of preparing them; but the exact formation of bougies being a matter of the firſt importance, and this being only to be acquired by extenſive experience, it is better for ſurgeons to procure them from thoſe whoſe ſole profeſſion it is to make them, than to attempt to form them themſelves.

Beſides the forms of plaſters mentioned in theſe preſcriptions, other articles have been employed for the conſtruction of bougies, particularly cat-gut and reſina elaſtica. Of theſe the latter is by much the beſt, and for all the ſmaller kinds of bougies, I now find it to be preferable to the beſt bougies of the common kind. Even when of the ſmalleſt ſize, it can be made of ſuch a degree of firmneſs as to admit of being puſhed with conſiderable force, which is not the caſe with the ſmaller kinds of common bougies, which are apt to bend, and to become twiſted, although introduced with much care and attention.

The great expence of bougies of this kind has hitherto prevented them from being ſo generally known as they ought to be: beſides, they were at firſt made ſo ſoft that they nearly diſſolved in the urethra on being allowed to remain in it for the ſpace of an hour or two; but this fault is now ſo entirely removed, that I have known them remain in the paſſage ſeven or eight hours at once, and yet as firm on being withdrawn as when firſt introduced.

This renders it a valuable article, not only for bougies, but flexible catheters.

This resin has one very essential advantage over every composition that has yet been employed for bougies. It does not crack or break while in the urethra, however frequently it may be introduced. When the common bougies are prepared with much attention, and the composition of which they are formed is not too much boiled, they may sometimes be used two or three times with safety; but, in most instances, they cannot with propriety be introduced more than once. Nay, many of them, on remaining an hour or two in the passage, are so much cracked as to excite a great deal of irritation and pain even on their first introduction, insomuch that I have met with different instances where patients had been deterred by this cause alone from using bougies, the irritation which they excited being so great as to be perfectly insupportable; while, on having recourse to those formed of resina elastica, they were found to create no kind of uneasiness.

These bougies are formed of fine silk, or linen, dipped in the resin dissolved in æther. They were originally invented by Mr. Thedn, of Berlin, and now are made by different artists in Paris. There is cause to regret that the art of forming them is as yet confined to a very few, so that our supplies have hitherto been both scarce and uncertain.

In the use of bougies the following are the points which particularly require attention:

1. They should be provided in such numbers, and of such variety of sizes, that there may be no doubt of as many being at hand as in any case may be requisite.

2. On proceeding to introduce the first bougie, care should be taken to fix upon one of such a size as will probably pass without exciting much pain. It is better at first to have it rather smaller than might be made to pass, than be afterwards under the necessity of withdrawing it. Of this we may in general judge by the size of stream in which the urine is observed to flow. It is often indeed found to be forked, and sometimes flat-

tened, owing to the form and nature of the ſtricture, but, with ſome attention to this circumſtance, we may, for the moſt part, be determined in the ſize of bougie that will anſwer.

3. The patient ſhould be placed in ſuch a poſture, as tends, in the moſt effectual manner, to relax the urethra. He may either be made to ſtand, with his thighs ſeparated, and his body bent gently forward, or he may be laid upon his back, with his thighs not only ſeparate, but raiſed. He ought, on no account, to be ſeated. In ſitting the urethra is apt to be ſo much compreſſed that no ſpace is left for the paſſage of a bougie. I have known ſeveral unſucceſsful attemps to paſs a bougie from this cauſe alone.

4. The ſurgeon being ſeated on the right ſide of the patient, ſhould graſp the penis with his left hand, and, at the ſame time ſhould draw it gently forward, ſo as to ſtretch the urethra to ſuch a degree as may prevent it from catching the point of the bougie. With the bougie previouſly well oiled, in his right hand, he ſhould inſert the point of it into the urethra, when it muſt be paſſed ſlowly, though firmly on, till it meets with reſiſtance. Neither ſhould he deſiſt at once on the ſtricture being met with. It anſwers better to continue to puſh on the bougie with a due degree of firmneſs, than to withdraw it immediately, as is often done. The firſt application of a bougie to the obſtruction, is very apt to excite irritation and ſpaſm, even in the ſtricture itſelf; and I have often thought that this was more eaſily overcome by puſhing the bougie on at firſt than by any ſubſequent introduction of it.

5. A knowledge of the force that may with ſafety be employed in paſſing a bougie, can only be acquired by experience. The leſs violence that is done to the urethra, or to the cauſe of contraction, the better. It cannot, in ſome caſes, be done without pain, but it ſhould never be made to force a diſcharge of blood. When blood comes away, the inſtrument ſhould be inſtantly withdrawn: for when this takes place, we may always be certain that ſome parts have been injured which ought not to have ſuffered, and by continuing to force on the bougie, that

there is a conſiderable riſk of its forming a new paſſage for itſelf.

6. The diſtreſs which enſues from a new opening being formed by a bougie is apt to be ſo great, that nothing ſhould be omitted that can in any way tend to prevent it. When there is cauſe to ſuſpect, from the quantity of blood diſcharged, that the membrane of the urethra is injured, the bougie ought not to be again introduced for ſeveral days; not till there is reaſon to ſuppoſe that the wound in the urethra is healed, for, till this takes place, it is obvious that it would be very apt to renew the injury.

7. As bougies ought all to be of a conical form, they ſhould not be puſhed farther at firſt than freely through the firſt obſtruction, otherwiſe the contracted part is apt to be torn open with too much force. It anſwers better to proceed gradually, and to increaſe the ſize of the bougie, or to puſh one of the ſame ſize farther on, in ſuch a manner, as may avoid every riſk of injuring the membrance of the urethra.

It is true that cures will be obtained where bougies have been introduced with much violence; where violent pain, accompanied with hæmorrhagy, has been excited: but this is a practice, which, for the reaſons I have mentioned, ought never to be adopted.

8. The bougie being introduced, ſome attention is required to prevent it from ſlipping altogether into the urethra, as well as for retaining it in the depth at which it is inſerted. We obtain the firſt of theſe objects by bending the end of the bougie, which, for this purpoſe, ſhould be left at leaſt half an inch out of the urethra; and the uſual method of retaining a bougie in it place is, by tying a piece of ſoft cotton thread to the end of it, and fixing it with this either directly to the penis, by paſſing it once or twice round about the glans, or connecting it to the circular belt of a common ſuſpenſory bandage. But the moſt effectual method, as well as the eaſieſt, which I have tried, is fitting the penis with a ſmall bag or pouch of cotton or linen. The bougie being introduced with its end bent down, the bag muſt be put

over the penis, and being fixed with two pieces of tape to a circular belt round the body, the bougie is in this manner eaſily retained.

Common bougies being of no great value, may be cut of ſuch a length as to leave half an inch or ſo out of the urethra, for the purpoſe of bending down in the manner I have mentioned; but thoſe of the elaſtic gum ſhould be kept of every variety of length, from three or four inches to nine or ten; and being eaſily formed with a knob at the large end, they are thus, in the moſt certain manner, prevented from ſlipping in.

When this caution has been neglected, and when a bougie is thereby allowed to ſlip completely into the urethra, it is ſometimes, by the aukward attempts of the patient, forced altogether into the bladder.

In this ſituation, it cannot be removed but by cutting into the bladder, as is done in the operation of lithotony, and extracting it with forceps. But while the bougie continues in any part of the urethra it may be taken out by an operation of much leſs importance and hazard.

When the end of the bougie can be ſeen, it may with ſome care and attention be laid hold of with a ſmall hook, or with narrow-bladed forceps, ſuch as are uſed for extracting ſtones that fix near to the end of the urethra. But when it has paſſed ſo far in, that it cannot be perceived, this method of extraction will not ſucceed.

In this caſe it can only be got out by making an inciſion upon it directly into the urethra. The ſkin ſhould be firſt drawn back, when a cut ſhould be made through the teguments and urethra at once, of at leaſt half an inch in length, when, if the end of the bougie can be laid hold of, it may be taken out at this opening; or if this be not practicable, it may be puſhed forward till the end of it paſſes out at the end of the urethra. This may be done either with ſmall forceps or pliers, or by ſticking a pin into the bougie at the opening, and puſhing it ſlowly on. The wound for the moſt part heals eaſily.

10. The circumſtances which next requires attention in the uſe of bougies is, the time they ſhould be allowed to remain in the urethra, and the frequency with which they ſhould be introduced.

As bougies act, perhaps, entirely in the cure of ſtrictures by the preſſure which they afford, and prove chiefly uſeful by the total change of ſtricture which they induce in the parts to which they are applied, they muſt neceſſarily require a conſiderable time for effecting this. The longer, therefore, that they are retained in the urethra, the ſooner this will be accompliſhed. But while we attend to the removal of the ſtricture, care muſt be taken to prevent injury by their exciting too much irritation. This, indeed, is the circumſtance by which we ought to be chiefly directed. It may be laid down as a general rule that bougies may be retained in the urethra as long as they excite no pain or irritation; while, in every inſtance, they ſhould be withdrawn as ſoon as much pain is produced by them.

At firſt they can ſeldom be allowed to remain longer than half an hour at once; but, on the urethra being for ſome time accuſtomed to receive them, they may, for the moſt part, be left in it for ſeveral hours; and this may be repeated once and again during the courſe of the day.

11. During the time that bougies remain in the urethra the patient ſhould be prevented from walking or moving more than is abſolutely neceſſary. This is not uſually attended to with neceſſary ſtrictneſs, by which many are prevented from deriving that advantage from bougies which otherwiſe they would receive.

In walking, with a bougie in the urethra, the irritation induced by it is at all times conſiderable; but this, more eſpecially, when common bougies are employed. The motion in walking is apt to crack and break the plaſter of which they are formed, which renders their ſurfaces rough and unequal, by which it is obvious that much harm muſt be done.

12. In order to obtain the advantage of perfect reſt while bougies are introduced, we are adviſed by many to employ them only at bed time, and to allow them to remain in the paſſage during the night. This may anſwer when the patient is not liable to nocturnal erections, but where theſe are apt to occur it ought never to be per-

mitted. I have known ſeveral inſtances of much pain and inflammation induced by it. It may, in ſome circumſtances, be more convenient to apply bougies during the day, but it is evident that it may be done with more ſafety.

13. To admit as long a retention as poſſible of bougies in the paſſage, ſome have alledged, that the patient may, with ſafety, be allowed to void urine while they remain in it. I have known this done, and no harm enſue, where the urine was paſſed ſlowly, and with much caution: but I have alſo known the attempt do much harm, and, as the trouble of introducing the bougie a ſecond time is not equal to the hazard of allowing it to remain, I always adviſe it to be withdrawn on a deſire to void urine taking place.

Beſides the pain and inflammation which want of attention in this matter is apt to induce, and erections occuring during the introduction of bougies have likewiſe this effect, I have known different inſtances of its appearing to lay the foundation of ſpaſmodic affections of the urethra, which afterwards proved very obſtinate, even after the original ſtrictures were removed.

14. By gradually increaſing the ſize of the bougie, the ſtricture through which it is paſſed will at laſt be removed; but before it is entirely deſtroyed, it will be proper to puſh forward the bougie, to diſcover whether there is any other cauſe of obſtruction or not. It is better, however, not to make the attempt till the opening through the firſt is conſiderably enlarged, when it will much more readily ſucceed.

Whatever other ſtrictures are diſcovered, they muſt be managed in the manner we have adviſed for the firſt; the bougie muſt, if poſſible, be made to paſs through them all, and the ſize of it gradually increaſed till the urethra is opened to its complete, natural ſize.

15. In paſſing bougies for this purpoſe, it has been a point in diſpute, whether they ſhould be carried the length of the bladder, and allowed to remain in it or not. I am decidedly of opinion that they ſhould be paſſed completely into the bladder, as ſoon as this can be done, in order to

discover the utmost extent of the strictures; but I also think that they should never be allowed to remain in the bladder. The common bougies are so apt to crack, and pieces of the plaster to fall off, that this might very possibly happen from their being immersed in urine; and we all know, that if a particle should drop, not small enough to pass off with the urine, that it would probably serve as a nucleus for a stone. This would not so readily happen with bougies of elastic gum; but even these, where there is so much hazard, ought not to be trusted, particularly as there is no real necessity for it in the management of strictures; for it is found upon dissection, that they are always seated anterior to the neck of the bladder. They are often in the membranous part of the urethra; but they have, perhaps, never been met with in the prostate gland, I mean in the urethra as it passes through this gland.

It must be admitted that the urine is often obstructed by affections of this gland; by inflammation, as well as by a more indolent kind of swelling, to which, as we have elsewhere had occasion to see, it is sometimes liable. But this variety of obstruction, instead of being removed by bougies, is always injured by them. We are sometimes under the necessity of passing a catheter, even during an inflamed state of the prostate gland; but this should only be done for drawing off the urine when it has been completely suppressed. When the gland has been for some time swelled in such a manner as to create a stoppage to the flow of urine, it is obvious, from its firmness, that bougies cannot remove it, while, by the irritation which they excite, they never fail to do harm.

16. Besides the length of time which bougies should be kept inserted daily, it is an object of importance to determine at what period they may, with safety, be laid aside. This, I must acknowledge, is difficult to do, as it depends upon a variety of circumstances with which it is impossible, at all times, to be acquainted. Even where the stricture is so completely removed that bougies pass with ease, and the urine is voided in a full stream, the disease is apt to recur if the bougies be too soon left

off. They should, in every instance, be worn for a considerable time after all appearances of stricture are gone, and the more obstinate the disease has been, the longer they should be continued.

Even after a patient considers himself as so entirely well that he may conceive no hazard to ensue from the farther use of bougies being entirely dropped, still he ought to have them, at all times, in his possession, so as to be able, on the least return of obstruction, to employ them instantly. This is a precaution not often adverted to, but which ought never to be disregarded by any who has suffered in this manner: and I think it the more necessary to insist upon it, from several instances having fallen within my own knowledge of the most distressful consequences ensuing from a neglect of it. It is more particularly proper for all people, in this situation, going upon a journey, to be well provided with bougies; for, when from home, they cannot always readily meet with them, while, at the same time, they are more exposed to the various causes most apt to excite a a return of the disease. These particularly are, exposure to cold and dampness; much fatigue, whether on foot, horseback, or in a carriage; and excess in wine and spirituous liquors.

All of these causes act with such certainty in inducing a return of affections of this kind, that I have seldom known them fail where people have been much exposed to them; and, in most instances, their effect is perceived soon after their application. I have known a person, who, after being completely cured of strictures, for several years, has been seized with a very hazardous and painful return of the disorder, in the course of an hour or two after being much exposed to a cold, east wind. It is particularly apt to occur from violent exertion on horseback, and from being much overheated with wine; more especially from excess in port wine.

A return of stricture is also apt to arise from the urine being, at any time, too long retained after a desire takes place to pass it. This ought always to be guarded against; but I also think it right to mention, that pati-

ents ſometimes err in getting into the habit of voiding urine too frequently. By yielding immediately to every impulſe, ſuch a habit takes place that they are apt, from this cauſe alone, to continue, during life, to paſs it every hour or two. This proves not only very inconvenient, but it is alſo apt to induce a contracted ſtate of the cavity of the bladder, together with a thickening of its coats, its full diſtenſion, which naturally ought to occur from time to time, being thereby prevented. Hence it is a matter of no ſmall importance for patients, in this ſituation, to obſerve as juſt a medium as can be done between the two extremes which we have mentioned.

On the leaſt return of ſtricture being perceived, whatever the cauſe may be, a bougie ſhould be immediately introduced. The patient, if he is plethoric, ſhould be blooded in proportion to his ſtrength; his bowels ſhould be opened with a gentle laxative, or with a clyſter; and he ſhould be kept in bed till the violence of the diſeaſe be removed. In this manner I have known the moſt formidable attack ſoon carried off, while, from treating them with inattention, even the moſt trifling ſymptoms have been rendered ſevere, and in the higheſt degree obſtinate.

The ſudden and unexpected manner in which patients are often attacked with a return of theſe affections, has given cauſe to ſuſpect that they muſt, in ſuch inſtances, proceed from ſpaſm. But the obſtinacy with which they often continue, as well as every other circumſtance attending them, renders it obvious, that, in a great proportion of caſes, they proceed from cauſes of a more permanent nature than ſpaſm is almoſt ever found to be.

17. We have hitherto been ſuppoſing that the ſtrictures are of ſuch a nature as to permit a bougie to be paſſed with no great difficulty; in which caſe, no doubt can be entertained of our being able, by perſeverance, either to accompliſh a cure, or to afford at leaſt very effectual relief, and to prevent any alarming obſtruction from taking place to the paſſage of the urine; for however bad a ſtricture may be, if bougies of a ſmall ſize can be paſſed at firſt, we may always be able, as I have already obſerved, in a gradual manner, to introduce thoſe of a

larger size. But frequently, either from the passage being contracted to a very small size, or from the stricture being altogether on one side of the urethra, by which the passage is thrown over to the opposite one, after a variety of attempts we find no progress made, or if any thing is gained, it is so inconsiderable as to afford no kind of relief. This proves always very dispiriting to the patient, and is apt to dispose practitioners not much versant in this branch of business to desist from all further trials: considering the disease to be incurable, they prescribe a course of palliatives, which, for the most part, avail little, while the only remedy from which advantage could be expected is deserted.

This ought never to be done, at least it ought never to come on the part of the practitioner, nor can any thing warrant the measure but the patient himself being determined against the farther application of bougies. This, from impatience and disappointment, is apt to happen; but it ought, at all times, to be as much as possible resisted. Even in the most obstinate obstruction that occurs, if the passage be not altogether obliterated, a surgeon of experience will scarcely fail, if he be not prevented by the impatience or timidity of his patient from persevering for a due length of time.

18. When there is cause to suspect that the passage is thrown over to one side of the urethra, by the stricture being fixed in the other, a point in which we may sometimes be determined by external examination with the fingers, and most frequently by the feelings of the patient, the extremity of the bougie should be slightly curved or bent before being inserted, and the point of it being turned towards that side where the passage is understood to be, if carried on in this direction, we will sometimes succeed, when various attempts have failed in the usual manner. It will be readily supposed that the curvature given to the bougie must be very inconsiderable; but even the slightest will sometimes give it the direction which we wish it to take, while it does no prevent it from passing, with sufficient ease, along the urethra.

19. In the introduction of a bougie it ought to be

kept firm between the finger and thumb of the right hand, and pushed gradually forward till it reaches the ſtricture; but, when it has got this length, it commonly anſwers better to twirl it between the finger and thumb, taking care to puſh it gently forward at the ſame time. At leaſt I often ſucceed in this manner when the uſual method of puſhing it directly on, has failed.

20. I have already obſerved that no more force ſhould be uſed in the introduction of a bougie than is merely neceſſary for making it paſs; but it is proper to remark, that, in the hands of a ſurgeon of experience, much more force may with ſafety be applied than others can, with any propriety, venture to employ. By puſhing a bougie ſlowly and gradually forward, we often force it through ſtrictures without any diſcharge of blood taking place, while much pain and laceration is ſometimes produced even by leſs violence, when applied in a hurried or quick manner.

21. When we find upon trial that a ſmall bougie, nearly the ſize of the opening, is made to paſs, no force will be afterwards required, if the bougies be gradually increaſed in ſize. But when we find, upon repeated trials, that the remaining paſſage cannot be diſcovered, and when we therefore mean to employ more force, a bougie of greater ſtrength ſhould be uſed in place of the ſmaller one. The ſmall-ſized bougies, particularly thoſe of the common kind, are ſo eaſily bent that they ſhould never be employed where much force is required. I have known even ſurgeons of experience puſh forward bougies of this kind, and concluding that they had paſſed the ſtricture, have carried them on till they imagined they had nearly reached the bladder, when, on being withdrawn, they were twiſted up in the form of a cork-ſcrew, having never gone farther than the ſtricture.

With a firm, well-poliſhed bougie of elaſtic gum, well rounded at the end, and not ſmaller than a crow's quill, ſuch a force may be applied as will often ſucceed when no advantage can be derived from thoſe of a ſmaller ſize; and we ſhould not be deterred from proceeding, although the firſt trials prove unſucceſsful; for we often paſs the

ſtricture by perſeverance when no advantage was gained at firſt.

I have reaſon, indeed, to imagine, from what has happened in the courſe of my own practice, that few caſes will occur which may not ultimately be cured by bougies. But when they do, in what manner are we to proceed? When every trial that we dare venture upon with bougies fails, what are we to do? This, it is evident, muſt depend entirely upon the ſtate of the parts affected, and upon the degree of obſtruction which takes place.

If there is ſtill ſuch an opening left as admits of the urine paſſing off with tolerable eaſe, I would adviſe nothing farther to be done. A patient, in ſuch a ſituation, had better ſubmit to the inconvenience of paſſing it ſlowly, and even frequently, than to the operation of removing the ſtricture, which conſiſts in laying the obſtructed part of the urethra open, and in the frequent introduction of a bougie during the proceſs of the reunion of the divided parts. This, however, is an operation of much importance: it is attended with ſo much pain, and with ſuch uncertain ſucceſs, that no practitioner of experience would recommend it while the urine is not totally obſtructed; and long before this could probably happen, the ſituation of the parts lying between the ſtricture and the bladder is commonly ſuch as to induce the patient to ſubmit more readily to any operation that may be neceſſary than he ever would have done in a more early ſtage of the diſorder. Whenever the ſtricture occaſions much difficulty to the flow of urine, that part of the urethra lying between the ſtricture and bladder, is neceſſarily diſtended on every attempt to void urine. This frequent ſtretching at laſt weakens the lining membrane of the urethra; the urine is at firſt in ſmall quantities, and afterwards in larger, forced into the ſurrounding cellular ſubſtance: this, forming one or more ſmall tumours, at laſt burſts out through a correſponding number of openings, either in the perineum, or in the cellular part of the ſcrotum. At leaſt this is the uſual progreſs of ſuch tumours when the ſtrictures in the urethra, by which they were produced, cannot be removed.

This is the moſt frequent cauſe of the diſeaſe we have already had occaſion to mention, Fiſtula in Perineo, in which the urine continues to flow out at the newly forced openings, as long as the ſtrictures in the urethra are allowed to remain, and which accordingly, as we have already obſerved, makes the patient eaſily ſubmit to whatever may be neceſſary for removing them. In ſuch circumſtances nothing will prove ſucceſsful if the diſeaſed parts be not freely laid open. A ſtaff being introduced the length of the ſtricture, and a ſmall probe paſſed in at one of the openings, and carried to the oppoſite ſide of the ſtricture, the intermediate ſpace ſhould be laid open by an inciſion in the direction of the urethra. In this manner the cauſe of obſtruction will be diſcovered and removed, and the other ſinuſes communicating with the urethra being likewiſe laid freely open, a cure even of the worſt caſes that occur, may thus be frequently obtained. To enter more fully into the conſideration of this operation, and of the after treatment of the ſores, would here be improper, as it would extend this article to too great a length. It could not be done with preciſion and clearneſs without entering upon the general doctrine of fiſtula, and upon different methods of cure that have been propoſed for it; and as this has been done in a different work, I muſt now refer to what I had then occaſion to ſay upon it *.

Before concluding the conſideration of ſtrictures in the urethra, I think it neceſſary to notice a method of cure that has been propoſed where we fail in the introduction of bougies, the repeated introduction of cauſtic into the urethra, with the view of deſtroying the cauſe by which the ſtricture is produced.

This practice prevailed upwards of a hundred years ago, but was ſoon relinquiſhed. It has lately, however, been revived, or rather a propoſal made for reviving it, by Mr. Hunter of London, under whoſe direction, it is to be hoped that it will ſoon become as generally uſeful as we can ever expect it to be. But as I conſider this prac-

* V. Syſtem of Surgery, chapters xv and xx.

tice as more or less hazardous, and not likely to prove often effectual, I shall briefly state what leads me to form this opinion, that others may be on their guard against too implicit an adoption of it.

The introduction of caustic into the urethra must prove hazardous from two circumstances, our not being able, even with all the pains we can take, to apply it to the stricture alone, without injuring the contiguous parts of the urethra, and the risk which there must always be of some small portion of the caustic breaking off and being left in the passage.

Mr. Hunter has indeed invented a very neat apparatus for the introduction of caustic. It consists of a silver tube, open at both ends, nearly the thickness of a common catheter, with a port-crayon, somewhat longer than the tube, into which the caustic is fixed. A stillette, with a perfectly-round end, is first passed through the tube, and if it be exactly fitted to the end of it, the two together may be carried with perfect ease along the urethra till they come in contact with the stricture, when the stillette to be withdrawn, and the port-crayon, with the caustic fixed in it, introduced. The caustic being applied to the stricture for about the space of a minute, must be withdrawn along with the instrument, and this must be repeated every two or three days till the cause of obstruction is removed.

This, from description, appears perfectly simple, and of easy execution: but notwithstanding the ingenuity of the invention, it is obviously liable to the two objections which I have mentioned. We know even where parts are uncovered, and therefore immediately under view, that it is exceedingly difficult to destroy diseased parts with caustic, without injuring the contiguous sound parts. In the urethra, therefore, where we receive no advantage from the eye, and where the slightest deviation of the instrument may fix the caustic upon the urethra itself, instead of the stricture, there must evidently be a good deal of hazard from this circumstance alone, independent of the chance of injuring the contiguous parts merely by the spreading of the caustic, admitting it to be applied with all manner of exactness.

Beſides, as the ſize of cauſtic that can be paſſed in this manner is neceſſarily very ſmall, there muſt always be ſome hazard of its ſlipping out or breaking off, an occurrence from which the higheſt degree of diſtreſs would enſue; for it could not be extracted, and dilution could not be employed with ſuch effect as to prevent it from doing a great deal of miſchief.

Another very important objection occurs to this practice. A great proportion of all ſtrictures, perhaps nearly ninety of a hundred, are ſeated beyond the curve of the urethra, to which an inſtrument ſo ſtreight as a tube acting as the conductor of another body ought to be, cannot be carried. But Mr. Hunter, foreſeeing the difficulty, has endeavoued to remove it by propoſing that the end of the tube ſhould be flexible, and of the ſame form with the common flexible catheter of ſilver. But this, while it apparently adds to the ingenuity of the invention, renders it evidently more hazardous. The ſmall point of cauſtic contained in the port-crayon will be more apt to be broken or looſened in paſſing through a curved tube than through a ſtreight one, while it will not be poſſible to apply it to any one point with ſuch firmneſs and ſteadineſs.

But even admitting that cauſtic may with ſafety be conveyed to ſtrictures in the urethra, yet, in thoſe caſes which do not yield to the uſe of bougies, the obſtruction is generally of conſiderable extent, and the quantity of cauſtic neceſſary for removing it ſo great, thatthe contiguous ſound parts of the paſſage muſt be much injured, whatever care and attention we beſtow in the application of ſo active a remedy. On theſe accounts, it would appear, that for the removal of ſtrictures in the urethra, the application of cauſtic is either impracticable or unſafe. In all ſlight obſtructions of the urethra, a degree of force may be uſed with bougies, ſufficient for removing them. Whenever this can be done, no perſon will doubt of the propriety of preferring them to the uſe of cauſtic; and when the cauſe of obſtruction is of ſuch extent as to render our attempts with bougies unſucceſsful, there will be little or no room to hope that cauſtic

will anſwer the purpoſe. In other parts of the body we all know how difficult it is to remove even the callous edges of an ulcer with cauſtic. Nay, in many inſtances, new parts ſeem to form before the eſchar produced by the previous application of the cauſtic has come off. I have no heſitation, therefore, in ſaying, that in ſimilar affections of the urethra, proceeding to the extent which we here ſuppoſe them to do, cauſtic would either be altogether inadequate for the purpoſe, or muſt be applied in ſuch quantities as would be attended with a great deal of hazard.

In all ſuch circumſtances, I conſider it as preferable to let the diſeaſe take its uſual courſe. The worſt that can happen is, the formation of ſinuſes behind the ſtrictures, and the diſcharge of urine from the openings which theſe produce. Few patients incline long to ſubmit to this; but I conſider the cure of this ſtate of the diſeaſe, by the mode of treatment already pointed out, as more certain, while it is obviouſly much leſs hazardous than the means propoſed for preventing it by the application of cauſtic.

SECT. V.

Of deranged Senſations in the Bladder, Urethra and contiguous Parts.

ON the running and other leading ſymptoms of Gonorrhœa becoming moderate, all the others uſually abate, and the patient, for the moſt part, is perfectly well, ſoon after the diſcharge leaves him.

This, however, is by no means univerſally the caſe, for it ſometimes happens that a good deal of diſtreſs remains long after the diſcharge is completely removed, and as the ſymptoms which take place in this ſtate of the diſeaſe are of a nature which cannot be referred to any particular head, I have judged it proper to ſpeak of them in a ſeparate ſection.

Without any fixed pain, a patient, who, from the diſ-

charge and other ſymptoms of Gonorrhœa leaving him, has cauſe to imagine that his cure is completed, will be ſuddenly ſeized with uneaſineſs over his loins; painful feelings over all the region of the bladder, particularly about the neck of it; ſenſe of wearineſs on the region of the kidneys, which ſometimes becomes much pained; a conſiderable degree of uneaſineſs over the whole courſe of the urethra, particularly about the glans, and a painful ſenſation of rolling, and other unuſual motions, in the teſticles.

In ſome caſes theſe ſymptoms, which ſeem to be confined to the organs of urine and generation, take place either in whole or in part by themſelves. At other times they are conjoined with affections of other parts, chiefly with thoſe of the ſtomach and alimentary canal. In one caſe they were accompanied with regular attacks of cholic, which had all the appearance, from the violent degree of pain which occurred, of proceeding from inflammation, but which always ſubſided immediately on the ſymptoms being removed by which it ſeemed to be induced. In different inſtances I have known ſickneſs and vomiting ſucceed to that painful uneaſineſs to which patients in this ſituation are ſometimes liable in the kidneys.

Diſtreſsful feelings frequently occur in the rectum, which give cauſe to ſuſpect, in ſome inſtances, that they proceed from piles, and in others from tumours forming in the end of the gut. A painful teneſmus often accompanies this ſet of ſymptoms.

In ſome almoſt every ſymptom occurs which uſually takes place in ſtone in the bladder. A dull, heavy pain is felt at the neck of the bladder, which ſpreads along the urethra, and fixes upon the glans. The patient is diſtreſſed with frequent deſire to paſs water, and in paſſing it, it often ſtops ſuddenly when coming off in a full ſtream.

In a few caſes ſymptoms of paralyſis occur, both in the bladder and urethra. The patient at one time finding it difficult, or even impoſſible, to force the urine out of the bladder, while at others, it runs off in drops, without his being able to retain it.

Theſe unequal ſtates of the power of paſſing and re-

taining the urine will ſometimes occur alternately, ſeveral times in the courſe of the ſame day; while at times one of them will continue for ſeveral days together, and at laſt will diſappear ſuddenly, after having reſiſted every remedy that had been employed for it.

It will readily be ſuppoſed however, that all of theſe ſymptoms cannot probably occur at the ſame time in the ſame patient, but every practitioner muſt have met with all of them in different patients.

At the ſame time that they take place with ſome variety, they likewiſe occur in very different degrees. In ſome they are ſo ſlight as merely to excite ſome trifling degree of uneaſineſs, and ſo tranſient, that they come and go frequently in the courſe of the ſame day; while, in others, they are ſo fixed and permanent that the patient remains in a ſtate of conſtant diſtreſs, and experiences ſuch a degree of it as he is ſcarcely able to ſupport.

In women, the bladder, kidneys, and abdominal viſcera, are equally liable to be affected as in men; and they are alſo apt to be diſtreſſed with uneaſineſs about the neck of the womb, and bearing-down pains, ſtretching to the thighs.

Even in the moſt firm-minded people the ſymptoms I have deſcribed prove frequently very diſtreſsful; but where the mind is weak, and the imagination eaſily affected, they arrive in ſome inſtances at the moſt alarming height. In whatever degree they may appear, they are attributed to the preceding diſeaſe having either been improperly treated or not completely cured; and when this occurs in a mind prone to fears and anxiety, the diſtreſs which they are apt to excite, is in ſome inſtances ſo great, as can ſcarcely from ſuch a cauſe be ſuppoſed to exiſt. Whether a courſe of mercury be adviſable or not, the patient is never ſatisfied till this medicine be preſcribed; for he is always afraid that his conſtitution will be ruined if mercury be omitted. If this proves ſucceſsful, or if he gets well when under it, he remains completely ſatisfied; but when this does not happen, as is the caſe in moſt inſtances, he then believes that he is incurable, and that his ſituation is deſperate. Every variety of noſtrum is now had recourſe to: by the effect of theſe, and ſtill

more by the agony of mind under which he labours, his conſtitution at laſt begins to ſuffer; he gradually becomes weaker and emaciated; and if his life is prolonged, it is almoſt always a ſcene of anxious inquietude and diſtreſs.

The cauſe of all or any of theſe ſymptoms it is often impoſſible to explain. Were they to happen chiefly where the previous inflammation has run high, or where the patient, when under cure, had been particularly apt to indulge in venery, exceſs of wine, or bodily fatigue, one or other of theſe cauſes would tend to account for them. But this is by no means the caſe. They are met with as frequently where the diſeaſe has been of a mild nature, and where it was cured in an eaſy manner, as where the ſymptoms have been ſevere and obſtinate. Where this takes place we are apt to ſuppoſe that they are moſtly, if not entirely, of an imaginary nature, and to treat them accordingly. This, to a certain degree, may often be proper, as it may fortify the mind of the patient againſt thoſe ill grounded fears to which he might otherwiſe be expoſed; but we are not to ſuppoſe that ſymptoms of this kind are always ideal, merely from our not being able to account for them, or from the previous Gonorrhœa having been of ſuch a mild nature as we may imagine ought not to have produced them. I met with inſtances of this, where the previous diſeaſe was exceedingmild, and where no obvious affection of the parts was perceptible, and yet the violence of the diſtreſs in ſuch a degree as kept the patients in a ſtate of conſtant miſery.

Many of the ſymptoms enumerated above are ſuch as are produced by tumours about the neck of the bladder, particularly by affections of the proſtate gland, and by a contracted ſtate of the bladder itſelf. In ſuch caſes, the cauſe of the diſeaſe is at once rendered obvious by examination with the finger in ano; but at preſent we are ſuppoſing that no organic affection can be diſcovered either inwardly or outwardly, an occurrence by no means uncommon, and in which I therefore conclude that the ſymptoms proceed from a deranged ſtate of the nerves, produced by the previous affection of the urethra.

I have accordingly arranged all of them under one general head of Deranged Senſations, nor is there cauſe, from the nature of the remedies found to prove moſt ſucceſsful in removing them, to treat of them ſeparately, nearly the ſame general treatment being found to anſwer in all of them.

Before proceeding to enumerate the remedies for affections of this kind, I may obſerve, that although we cannot in any caſe ſay poſitively what will accompliſh a cure, I can with certainty ſay what will not anſwer. I have already remarked, that patients, in this ſituation, are apt to ſuſpect that their ſymptoms proceed from the previous diſeaſe having been improperly treated. This leads them to imagine that a latent poiſon is ſtill lurking in the conſtitution, and mercury being the only certain antidote for the venereal poiſon, they always inſiſt upon this being preſcribed. Some practitioners, ſtill entertaining the opinion of Gonorrhœa and Lues Venerea proceeding from the ſame infection, conſider it neceſſary to preſcribe mercury for all the conſequences of each of them, while others are readily prevailed upon, by the ſolicitation of their patients, to permit what they may ſuppoſe it would not be in their power to prevent. But from all the experience which I have had of it, I am clearly of opinion that no advantage is ever derived from it, while, in a great proportion of caſes, it evidently does harm. By relaxing the conſtitution it renders, it much more irritable than it was before, and thus tends to aggravate all ſuch ſymptoms as thoſe we are now conſidering.

The remedies upon which we chiefly depend are, blood-letting, opiates, warm bathing, bliſters, cicuta, hyocyamus, electricity, Jeſuit's bark, and cold bathing.

When the conſtitution is already much reduced and debilitated, blood-letting muſt neceſſarily be inadmiſſible; but whenever plethora takes place, nothing proves more uſeful than blood-letting, both general and local, particularly the diſcharge of blood from the perineum, and parts contiguous to the anus, by the application of leeches. In ſuch circumſtances it removes or leſſens irritability with more certainty than any other remedy. Even

where there has been cauſe to ſuſpect a tendency to paralyſis in the bladder and contiguous parts, leeches applied as near as poſſible to the ſeat of the diſeaſe have proved ſerviceable; nor need we ever heſitate in adviſing them where the patient is not much emaciated. But the remedy which, in all affections of this kind, proves moſt univerſally uſeful is opium. It not only ſooths and allays the preſent diſtreſs, but when, by a well-judged, timeous application of it, we can, for a week or two together, prevent the acceſſion of pain, we in this manner often accompliſh a cure. It anſwers the purpoſe whether it be given by the mouth or in clyſters, but it proves always moſt effectual when given in ſufficient doſes by the anus.

The external application of laudanum, and of anodyne balſam, in ſome caſes affords relief, particularly when conjoined with æther. In thoſe deranged ſenſations which ſometimes occur in the perineum and about the neck of the bladder, immediate relief is often obtained by rubbing the parts effected with a mixture of warm laudanum and æther; and I have known the ſupperſſion of urine, which occurs from this cauſe, relieved in the ſame manner.

When opiates fail in procuring relief, or when they diſagree with the patient, the ſemicupium ſometimes ſucceeds. Warm fomentations applied to the perineum, and over the loins, often prove uſeful; and the ſteams of warm vinegar, conveyed with attention to the parts affected, have likewiſe been uſed with advantage. The beſt article we can employ in ſuch caſes for fomentations is a ſtrong decoction of the heads of poppies.

Bliſters, in all ſuch affections, are perhaps the moſt effectual of all our external applications. It is chiefly, however, where the urethra ſeems to be the ſeat of the diſeaſe that they prove uſeful, and where the neck of the bladder is affected with ſuch a degree of weakneſs as prevents the urine from being retained by it. In the former, bliſters act with moſt advantage when applied to the perineum, and in the latter they ſhould be applied to the loins. The moſt diſtreſsful ſenſations produced by this cauſe, and which for many years have obſtinately reſiſted

every other remedy, have, in some instances, been removed by the application of a blister to the perineum. In some cases one proves sufficient; but in others they require to be repeated once and again before all the symptoms disappear.

Upon the same principle with blisters, exciting a return of the running after it has stopped, or after it has been diminished in quantity, has at times been productive of some benefit. This may be done by fomenting the penis and perineum with warm water, the application of warm poultices to the perineum, and by a cautious use of bougies. The practice was probably suggested by symtoms of this kind having in some instances been removed by the patient getting a fresh attack of Gonorrhœa from a new infection, different cases of which I have met with.

In all such instances, where the inflammation recently induced is considerable, the previous symptoms are either much diminished in violence, or entirely removed. This would lead to the practice of exciting an inflamed state of the parts in a considerable degree, and which bougies will never fail to do, if covered with oil of turpentine, with a small quantity of common resin melted in it; but as it is obvious that much harm would ensue from this practice being carried any great length, it ought to be managed in every instance with the greatest delicacy and attention.

It may be proper to remark, that it proves chiefly useful where the disease is confined to the urethra; although, in some cases, it has succeeded even where the bladder and kidneys have been affected.

Where the urine in such cases passes off involuntarily, blisters, we have said, answer with most certainty when applied to the loins. This probably proceeds, from the disease in these instances raising, for the most part, from an affection of the bladder itself; but where it proceeds, as it may sometimes do, from a tendency to paralysis in the urethra and muscles connected with it, blisters will prove most useful when applied to the perineum.

Where the urine passes off in this manner, balsam of copaiba, and other astringent balsams, are usually given. They are supposed to act chiefly by restoring the tone

of such parts as appear to be relaxed and weakened, and which it is imagined they must do, from their having a peculiar tendency to pass off by the organs of urine. In like manner the internal use of cantharides is prescribed, from an idea of this symptom depending, in every instance, on a loss of tone in the parts affected, and from our knowing, that in most cases, cantharides proves a powerful stimulus both to the kidneys and bladder.

All of these balsams, as well as the common turpentines, which are not essentially different, may in all such cases be used with safety. In some instances they may perhaps prove useful, and I do not imagine they will ever do harm. This, however, cannot be said of the internal use of cantharides. In large quantities they act as a poison: and even where managed with caution, the principal of the practice seems, in such cases as we are now speaking of, to be doubtful; for as there is cause to suppose that the disease proceeds more frequently from too much irritability about the neck of the bladder and urethra, than from any deficiency of tone, there is reason to fear, that by increasing the sensibility of the parts affected, they would in many instances be more apt to do harm than good. It is therefore proper, previous to the internal exhibition of cantharides, to determine with accuracy whether the disease proceeds from real weakness or morbid irritability. In the one case they may sometimes prove useful; in the other they will be apt to add to the violence of the disease.

Cicuta has been frequently prescribed here; and when given to such extent as to act as an anodyne, it may sometimes prove useful. Upon the same principle, hyocyamus may with propriety be prescribed; but we have no reason to suppose that either of these articles act in any manner in curing the disease. As no organic affection appears to take place here, they cannot act by dissolving hard or enlarged parts. Any advantage derived from them will therefore be nearly in proportion to the anodyne effects which occur from them; and in this view, they may prove useful when opiates disagree with

the ſtomach, as in ſuch circumſtances it is of conſequence to have it in our power to employ remedies of a ſimilar operation.

Electricity has now and then given a temporary relief to ſymptoms of this kind. It ſhould be exhibited in the form of ſparks drawn from the parts chiefly affected, particularly from the perineum, and parts moſt contiguous to the neck of the bladder.

It is proper however, to remark, that the ſame obſervations are applicable in adviſing electricity that were made upon the internal exhibition of cantharides. Both of theſe remedies, as well as the application of bliſters to the loins, have been chiefly preſcribed, where, in affections of this nature, the urine paſſes off involuntarily, and they are adviſed upon the idea of this ſymptom proceeding from paralyſis of the neck of the bladder. But as there is much cauſe to imagine that the frequent diſcharge of urine, which patients in this ſituation are ſometimes diſtreſſed with, proceeds more from irritability in the neck of the bladder than from real weakneſs, there is reaſon to think that electricity, by increaſing the ſenſibility of the part affected, and which, in many inſtances, it evidently does, will rather tend to aggravate the complaint.

Bliſters, whether applied to the loins or perineum, may prove uſeful, not merely by the diſcharge which they excite, but by the irritation which they produce upon the ſkin. There is nothing more certain than our being often able to remove pain and irritability from one part by exciting it in others. Of this we have frequent proofs in the application of bliſters and other ſtimulants, in deep-ſeated pain in the ſide, where the diſtreſs is often removed as ſoon as the ſkin becomes warm and uneaſy, and long before any veſications are produced. Sinapiſms applied to the feet, have, in ſome inſtances, removed head-ach when every other remedy has failed. In like manner bliſters ſeem to operate when applied to the perineum, for the removal of thoſe ſenſations to which patients in this ſituation are ſometimes liable. But electricity, as well as the internal uſe of cantharides,

by tending to irritate the very parts in which the diſeaſe is ſeated, ſeem often to increaſe the violence of the ſymptom they were meant to remove.

By a due perſeverance in the uſe of one or other of theſe remedies we commonly ſucceed in leſſening or even in removing the violence of the diſtreſs; but as the ſymptoms are apt to recur, even after the patient conſiders himſelf as well, it becomes an object of much importance to obviate this. For this purpoſe, nothing proves ſo effectual as Peruvian bark and cold bathing. A free exhibition of the bark ſhould therefore be preſcribed, as ſoon as the pain and other ſymptoms have begun to diminiſh, and ſea-bathing ſhould be adviſed whenever it can be obtained. When this cannot be procured, cold water ſhould be applied locally, both to the perineum and loins. Some advantage is derived from the parts being bathed with it, but it proves more effectual when forcibly daſhed upon them.

An involuntary diſcharge of urine, which we have already had occaſion to ſpeak of, proves always troubleſome; but the diſtreſs which it excites, is trifling when compared with what ariſes from the patient not being able to expel it. Even without any inflammation, and where no cauſe of obſtruction can be diſcovered in the urethra, a patient will ſometimes find it impoſſible to paſs a ſingle drop. This, no doubt, occurs frequently from other cauſes; but every now and then we meet with it as an evident conſequence of irritability in the parts chiefly affected in this diſeaſe.

All the remedies we have already adviſed will be equally applicable in the treatment of this ſymptom, as for the removal of any of the others. Opiates, however, and warm bathing, prove chiefly uſeful; but when relief is not ſoon obtained, it becomes neceſſary to draw the water off with a catheter; and, as much harm is apt to enſue from this being long delayed, it ought to be adviſed as ſoon as the bladder appears to be ſenſibly diſtended.

In ſome caſes the introduction of a bougie will prove effectual; and as this gives leſs pain and irritation than

the paſſing of a catheter, it ought in the firſt inſtance, always to be preferred. One of the largeſt that will eaſily paſs ſhould be made uſe of; and, after allowing it to remain in the bladder for a few minutes, the patient ſhould be deſired to paſs his water inſtantly on the bougie being withdrawn. This ought not to be done with much force and preſſure, otherwiſe the neck of the bladder and urethra are apt to contract inſtantly on the bougie being taken out; while the whole will paſs completely off if it can be made to flow eaſily at firſt, along with the bougie.

When this our intention in employing bougies is fruſtrated, we are under the neceſſity of employing the catheter; and, as it is of much importance, in all ſuch caſes, to prevent irritation as far as it can poſſibly be done, catheters of reſina elaſtica ſhould be employed, inſtead of the common inſtrument of ſilver. It not only paſſes more eaſily, but when any difficulty occurs in getting it into the bladder, it may, in ſome inſtances, be proper to allow it to remain for a day or two together, which can never, with any propriety, be done with catheters of ſilver.

The practice of leaving catheters in the bladder is ſpoken of by ſome with much eaſe, and they adviſe it wherever any permanent ſtoppage occurs to the urine; but I have in different inſtances ſeen ſo much miſchief produced by it, that it is a meaſure I never adviſe but where much pain and difficulty occurs in the introduction of a catheter. In moſt inſtances, more pain is experienced from the inſtrument being allowed to remain in the bladder, than ever occurs from its being frequently paſſed. Beſides the irritation, which even the ſmoothest and ſofteſt inſtrument of this kind excites, they are apt to prove hurtful by incruſtations of calculous matter forming upon them, in conſequence of depoſitions from the urine. There are few people whoſe urine is ſo free of this kind of matter as to prevent a catheter, inſerted into the bladder, from becoming rough with it in a very ſhort ſpace of time. This practice, therefore, ought never to be adopted but where the

greatest difficulty is experienced in introducing the catheter.

SECT. VI.

Of Swellings of the Testicles.

A Swelling of one of the Testes is a very frequent occurrence in Gonorrhœa. From the resemblance which it bears to a hernia, and from its being supposed to proceed from the running or humour in Gonorrhœa falling down upon the testes, it is usually termed a Hernia Humoralis.

In some instances both testicles swell. They seldom, however, swell both at once; but the swelling, on leaving one testicle, is very apt to go to the other; and when both have in this manner been affected, they sometimes swell alternately for a considerable time together. I have known this happen for the space of a year and upwards, where the patient, during the whole period, was never completely free of the disease.

In long continued affections of this kind, the pain becomes inconsiderable; but the first attack of the disease is always accompanied with severe pain. The first warning which the patient receives of it is a very painful sensation in one of the testes, striking along the spermatic cord, near to the middle of his back. On examining the testes he finds it swelled, and so tender that he can scarcely bear it to be touched. He feels himself hot, and a general uneasiness prevails over his whole body, particularly over his thighs and abdomen. Neither can he move without increasing the violence of every symptom.

At first the swelling is confined to the epididimis; the back part of the testicle feels hard and enlarged; but in a very short space of time, often in the course of an hour, the whole body of the testicle becomes swelled. In this state of the disease a difference is still perceptible between the testis itself and the epididimis. The latter is hard, and somewhat unequally so; being, for the most

part, hardeſt and moſt prominent at the bottom, whereas, a ſoft uniform ſwelling prevails over all the anterior part of the teſticle.

In the progreſs of the diſeaſe, indeed, even the teſtis itſelf becomes hard, and if the means employed for preventing it do not prove ſucceſsful, the ſwelling of the epididimis and teſtis together come to form a tumour of very conſiderable magnitude, accompanied with a red inflammatory affection of the ſcrotum.

In this ſtate of the diſeaſe, the pain is often intenſe, accompanied with a very diſtreſsful ſenſation of the teſtis moving or rolling about. The ſkin is dry and parched, the tongue foul, thirſt prevails, and the pulſe is full, and quick. In ſhort, every ſymptom takes place which uſually attends a high degree of local inflammation.

There is no period of Gonorrhœa in which this affection of the teſtes does not occaſionally ſupervene. It occurs in all ſtages of the diſeaſe; even towards the end of it, when both the patient and ſurgeon are apt to conſider the cure as nearly complete: and in ſome we find it take place where no cauſe can be aſſigned for it, where neither the degree of the previous inflammation, nor the mode of life of the patient, were ſuch as could in any ſatisfactory manner account for it.

It is proper, however, to remark, that ſwellings of the teſtis which take place in this manner, ſeem, for the moſt part, to be of a very different nature from thoſe which occur during the virulent ſtate of the diſeaſe, and while theinflammation in the urethra is conſiderable. The latter appear to be altogether inflammatory. The diſeaſe proceeds more ſlowly to its height or acmé. It remains more permanently at the ſize to which it arrives, and it diſappears more ſlowly than the others, which come to their utmoſt height, in ſome inſtances, in an hour or two from the firſt approach of the ſwelling, and again diſappear with equal rapidity. Theſe I conceive to be partly inflammatory, and that in part they proceed from that kind of ſympathy which evidently ſubſiſts between the penis and teſtis, and which renders the one very apt to ſuffer from any diſeaſe with which the other may be affected. That ſympathy has much influence in the pro-

duction of this variety of the disease, is obvious from the swelling being apt to leave one testis, as we have already observed, and to fix, perhaps instantly, upon the other. This does not occur so frequently as the alternate affection of the eyes, from one of them only being at first affected, but every practitioner must have met with instances of it.

As it is observed that the running in Gonorrhœa is apt to stop on the first appearance of a swelled testicle, this gave rise to the idea of the affection of the testis proceeding from the matter falling down upon it, in consequence of being thus obstructed in its passage through the urethra. It is now well known, however, that no communication subsists between the urethra and testes, by which matter can pass from the one to the other; nor does the appearance which a swelled testicle affords, give reason to imagine that it proceeds from this cause. Instead of being soft and compressible, which it necessarily would be were it produced by matter, it becomes daily harder, till it arrives at a certain magnitude, when it gradually becomes softer again, but without any fluctuation of matter being perceived in it.

There is reason to imagine, that in most instances the testes become affected by the inflammation spreading from the urethra along the vasa deferentia. This has been doubted by some, but without any good reason being assigned for it, nor has any other mode of accounting for it been suggested. We see that by the vasa deferentia a direct communication takes place between the urethra and testes, and the first appearance of a swelled testicle commences in the epididymis, formed as it were by the termination of this very line of communication. In a great proportion of cases too, the patient is sensible of a pain stretching from the swelled testicle along the groin, which we know to be the direct course of the vas deferens.

A variety of other causes might be mentioned, which tend to excite inflammation in the testes in a similar manner with Gonorrhœa: among these are, the irritation produced by a stone in the neck of the bladder; by the irritation on the introduction of a catheter or bougies;

and the inflammation which takes place in these parts after the operation of lithotomy. A swelling of one or both testes is not an unfrequent occurrence from all of these, particularly from the latter, and from the use of bougies, especially when they are not properly introduced; and we see no manner in which it can be so readily produced as by the irritation excited about the neck of the bladder, carried along the vasa deferentia.

The consequences of swelling of the testes, which we have most to dread are, a hardened state of the parts chiefly of the epididymis, which, even when one, but more certainly when both testes are swelled, is apt to be followed by impotency; and a morbid irritability, which is sometimes so great as to prevent the patient for a considerable time from using any kind of exercise, and from following the ordinary occupations of life, without hazarding a return of the swelling of the testes. Suppuration in the body of the testis, from the inflammation induced by Gonorrhœa, is hardly an object of regard, for it does not take place in one of five hundred cases.

But the two circumstances I have mentioned of a permanent hardness in the epididymis, and that distressful irritable state of the testes itself, which are apt to succeed to this disease, are objects of the first importance, and require an immediate application of every remedy that can probably tend to prevent them. Scarcely any occurrence can prove more troublesome or inconvenient than swellings of the testis; and an enlarged state of the epididymis, when it takes place in any considerable degree, has, in many instances, as I have already observed, the effect of inducing impotency. To a certain degree, a swelling of the epididymis often continues for a great length of time; in some instances, during the life of the patient, without any bad consequence taking place, particularly when one testicle only is affected. But I have known so many instances of the contrary, and of such distressful effects ensuing from it, as makes me with confidence say, that nothing should be omitted that can or might probably tend to prevent or remove it.

As we find that all the ſymptoms of this diſeaſe, as well as the conſequences which enſue from it, are uſually ſevere in proportion to the degree of inflammation which takes place, it ought to be our view, in every inſtance, to prevent this from arriving at any great height. This is moſt effectually done by blood-letting; a proper uſe of laxatives; opiates; the application of anodynes and aſtringents to the parts affected; preſerving the body in a proper poſture, and ſuſpending the teſticle.

Of all theſe remedies blood-letting is the moſt effectual and certain, particularly local blood-letting by the application of leeches. In plethoric patients, or where the ſwelling arrives at any conſiderable bulk, blood ſhould be taken from the arm in ſuch quantities as the ſtrength will permit, while, at the ſame time, a number of leeches ſhould be applied over the teſtis. But in weakly people, particularly where none of the ſymptoms are violent, the abſtraction of blood by means of leeches alone will commonly prove ſufficient.

The firſt application of leeches to a ſwelled teſticle excites a good deal of uneaſineſs. They increaſe the irritability of the parts, and an increaſe of the tumour ſeems to be induced by them; but the diſcharge has ſeldom continued for the ſpace of an hour or two till the pain abates, the tenſion, which before was conſiderable, becomes much leſs diſtreſsful, and the ſwelling even appears to leſſen in bulk, and in the courſe of the following day the patient can allow the parts which he could not previouſly bear to be touched, to be handled with freedom.

For the moſt part one application of leeches, if a proper number has been uſed, proves ſufficient; but when any of the ſymptoms ſtill continue ſevere, particularly when the ſwelling does not diminiſh, when the the pain does not leſſen, and when the febrile ſymptoms do not abate, it becomes in ſome caſes neceſſary to repeat the application of leeches once and again. I think it here proper to remark, that we ſhould never heſitate in this ſituation to take blood with freedom. A conſtitution muſt be delicate indeed that will be injur-

ed even with repeated applications of leeches; and I am satisfied that very important advantages may be derived in all cases of swelled testes from a timeous and proper use of them.

Abstraction of blood by means of leeches is not only useful in shortening the duration of the inflammatory symptoms, but, in consequence of this, it proves serviceable in preventing two very distressful consequences, which swelling of the testes is very apt to induce, viz. that swelled, indurated state of the epididymis which I have mentioned, and the most frequent variety of hydrocele, formed by serum collected in the tunica vaginalis. We have already had occasion to remark, that a permanent swelling of the epididymis is a very frequent effect of an inflamed testicle, and I have met with several well-marked instances of hydrocele proceeding from the same cause. That blood-letting in any way, whether general or local, will at all times prevent the accession of these symptoms, I will not pretend to assert; but, from the result of much observation, I am convinced that it answers this purpose with more certainty than any other remedy that has yet been employed.

In many situations leeches cannot be procured; when this happens to be the case, nearly the same advantage may be derived from small punctures being made on different parts of the swelling. The punctures should be made with the point of a lancet, and if the scrotum be previously immersed in warm water, nearly the same quantity of blood will be obtained from them as from the same number of leeches.

As swelling of the testicle in Gonorrhœa seems in every instance to proceed from the irritation excited in the urethra, it is an object of the first importance to remove every cause that can in any degree tend to irritate either the urethra or contiguous parts. Hence, where costiveness prevails, gentle laxatives prove particularly useful. I have known different instances of hardened fœces collected in the rectum inducing swellings of the testes; and nothing tends more certainly than

this to keep up the diſeaſe, by whatever cauſe it may at firſt have been induced. But although coſtiveneſs is to be guarded againſt, we are, for a ſimilar reaſon, to ſhun the oppoſite extreme. Strong purgatives always excite much irritation in the rectum, and are therefore to be carefully avoided in Gonorrhœa. It muſt conſiſt with the knowledge of every practitioner that they univerſally do harm. Where the bowels are moderately eaſy, no medicines for this purpoſe can be required, but when they are not in this ſituation, caſtor oil, flowers of ſulphur, cream of tartar, or any other gentle laxative, ſhould be employed. Even theſe ſhould be given in ſmall doſes, repeated at proper intervals, rather than that any riſk ſhould be incurred of exciting irritation in the rectum by their being exhibited in larger quantities.

With a view to leſſen and remove the irritation and pain in the tumour with as much certainty and expedition as poſſible, opiates ſhould be preſcribed immediately on the pain becoming ſevere. When they can be avoided till one or more eaſy ſtools have been procured, they prove moſt uſeful; but when much irritation prevails, no regard ſhould be paid to this. As the ſickneſs and general uneaſineſs which ſometimes occur from a ſwelled teſtis are evidently the effect of irritation, nothing proves ſo effectual in removing theſe ſymptoms as adequate doſes of opiates; and at the ſame time that they remove this diſtreſs of the ſyſtem by leſſening the pain, they alſo tend to carry off the ſwelling of the teſticle. From an idea that opiates tend to increaſe the heat and other ſymptoms of fever, many practitioners are afraid of uſing them wherever fever takes place in any conſiderable degree; but much experience of their influence enables me to ſay, that they may be employed with much ſafety and advantage in every ſtage of ſwelled teſtis where the degree of pain is conſiderable.

This is ſo remarkably the caſe, that I have known inſtances of the hernia humoralis, as it is termed, being cured by opiates alone, which did not yield to the uſual remedies. In whatever manner Gonorrhœa may act in

exciting swelling of the testis, the tumour, when once produced, excites so much irritation, that, till this be lessened, the swelling for the most part continues obstinate. Next to blood-letting, opiates prove the most effectual remedy for this purpose.

While the internal exhibition of opiates thus proves useful, advantage is often derived from applying them to the swelling itself. This may be either by the application of soft pledgits, soaked in laudanum, or anodyne balsam, or by poultices made with a strong decoction of poppy heads and crumb of bread.

All the saturine applications prove useful here. When Goulard's extract, as it is termed, is employed, or what is nearly the same, the acetum lythargyrites, it ought to be in greater quantities than are used in other parts of the body; for the testes being protected by different coverings, remedies of this kind, when of the ordinary strength, do not readily affect them. When saccharum saturni is employed, as it will not dissolve in sufficient quantity in water, if vinegar be not added, and as vinegar proves an useful application, even by itself, these two remedies ought always to be combined.

The steams of warm vinegar act as an useful discutient here. In applying them, the testes should be properly suspended over a vessel in which boiling vinegar is contained; or the swelling may be fomented from time to time with flannel immersed in warm vinegar, and so strongly wrung, that nothing but steam remains upon it. Vinegar, in every form, acts with much advantage in this disease, and this gives a pleasant variety in the way of applying it.

Whatever remedy is employed, the body should be kept as much as possible in a horizontal posture, at the same time that the scrotum should be properly suspended. We find by experience that no remedy will prove effectual while the patient continues to walk about; while, in many instances, a horizontal posture of itself, will have a considerable effect in removing the disease. In suspending the scrotum, care should be taken to do it in such a manner that the testicle be completely sup-

ported without being compreſſed. Preſſure, even in a ſlight degree, always does harm, and ought to be avoided.

We have already had occaſion to obſerve, that in Gonorrhœa a ſtoppage of the diſcharge often takes place on the firſt approach of a ſwelled teſtis. This leads to the idea of ſome advantage being to be derived from our exciting a return of the running; and there is not a doubt of this proving in ſome inſtances uſeful. The diſcharge from the urethra not only leſſens the inflammation in the part from whence it proceeds, but it has alſo an influence on the tumour of the teſtis. As it is now univerſally admitted that a return of the running does not act by drawing matter directly from the teſtis, ſome have ſuſpected that it never can prove uſeful. But why may not a diſcharge excited in the urethra act in a ſimilar manner in removing an inflammation of the teſtis, that we know from daily experience happens with ſetons and other iſſues in the treatment of inflammatory affections of other parts? The fact indeed, is, that a plentiful return of the diſcharge very commonly relieves all the ſymptoms of this diſeaſe.

For the purpoſe of exciting a return of the running, bougies prove moſt effectual; but in affections of the teſtes they require to be managed with a delicacy not uſually obſerved in this branch of practice: for if more pain or irritation be produced than is neceſſary for the purpoſe, inſtead of acting as a remedy, they neceſſarily aggravate every ſymptom. In common practice, I think it better to truſt to the frequent application of warm emollients; ſuch as the immerſion of the penis in warm milk, or in decoction of althea, or lintſeed; applying warm poultices over the penis, and injecting warm oil or milk into the urethra.

From the inſtantaneous manner in which ſwellings of the teſtes ſometimes ſucceed to a ſtoppage of the diſcharge in Gonorrhœa, and from their appearing, we are told in ſome inſtances, even to precede this ſtoppage of the running, ſome have doubted whether they are to be conſidered as the cauſe or effect*. That the teſtes may

* Vide John Hunter, on the Venereal Diſeaſe.

firſt inflame and the running afterward ſtop, cannot be doubted. But although this may happen in a few inſtances, the very reverſe is what we commonly meet with, inſomuch that patients who have once been affected with ſwellings of the teſtes, are very apt to experience a return of the diſeaſe in every Gonorrhœa to which they may in future be liable, ſolely from the running being carried off in the uſual way. I know ſeveral, who, for this reaſon, dare not uſe even the mildeſt aſtringent injection; otherwiſe they are ſure to have a ſwelling of the teſtis induced: while, in others, it ſwells at the termination of the running, whether injections have been uſed or not. In the courſe of my obſervation, therefore, no cauſe for doubt has occurred upon this ſubject.

By a proper application of the different remedies we have mentioned, ſwellings of the teſtes are for the moſt part ſoon relieved, and at laſt carried off entirely excepting that permanent hardneſs to which the epididymis, as we have ſeen, is particularly liable. But although this is the common event of the diſeaſe, yet inſtances are not wanting, moſt frequently indeed from the patient's miſconduct, of the whole body of the teſtis remaining ſwelled, and obſtinately reſiſting all thoſe remedies which uſually prove effectual. If, in this ſituation, ſome application be not made, by which the ſize of the tumour is ſoon diminiſhed, and if it be allowed to remain ſtationary for any length of time, it is very apt to continue much enlarged, and ſometimes of a ſchirrous hardneſs during the life of the patient. I may alſo remark, that it is this ſtate of the diſeaſe which is moſt apt to terminate in hydrocele; or effuſion of ſerum into the tunica vaginalis teſtis, with which it is ſometimes attended.

In this ſituation mercury is commonly employed; and, in ſome inſtances when given ſlowly, as an alterative, I have ſeen it prove uſeful; but it is doubtful whether a complete courſe of mercury ſhould ever be adviſed or not, for when it does not carry off the ſwelling, which ſeldom happens, it is apt to increaſe it, and to induce pain and irritation in the tumour when none exiſted in it be-

ſore. Whenever mercury, therefore, is adviſed, it ought to be in ſuch quantities as cannot tend to quicken the circulation or excite fever. A decoction of mezereon has in ſome inſtances been given with advantage along with mercury*.

It is in this ſtate of a ſwelled teſtis, where the tumour does not yield, but remains nearly of the ſame ſize after the inflammation by which it was induced is gone, that emetics are moſt likely to prove uſeful. They have been uſed, I know, in all periods of the diſeaſe; but it is chiefly in the ſituation we are now ſpeaking of that I have ſeen them act with advantage. A ſmart emetic, carried a proper length, will ſometimes, in the ſpace of an hour or two, leſſen the bulk of a tumour which had for ſeveral weeks obſtinately reſiſted every other remedy. In ſome caſes one emetic proves ſufficient, while, in others, it requires to be repeated once and again. Mercurials were formerly uſed for this purpoſe. This was done from the diſeaſe being conſidered as a ſymptom of Lues Venerea, and for which mercury was known to be the only antidote. But we now know that tumours of the teſtes, which take place merely from Gonorrhœa, never partake of the Venereal Virus; and accordingly emetics, of whatever nature they may be, prove equally uſeful here with mercurials, provided the ſhock which they give to the ſyſtem is equally conſiderable.

I have ſometimes, in this ſtate of a ſwelled teſticle, applied a bliſter with advantage. It might not perhaps be altogether ſafe to apply bliſters while the ſcrotum continues much inflamed; but when the external inflammation and tenſion ſubſide, they may be adviſed with ſafety; and, in different inſtances, I have known them accompliſh a reduction of the ſwelling of the teſtis, where other remedies had for ſome time been employed without any effect.

A due perſeverance in the uſe of ſome or all of theſe remedies will ſeldom fail where a ſwelling of the teſticle is altogether inflammatory; but where it proceeds in a

* Vide Appendix, No 45.

great meaſure from irritability, as we jude to be the caſe where the ſwelling comes and diſappears ſuddenly, or where it comes and goes from one teſticle to another, other remedies are, in this ſituation, found to prove more effectual.

Even in this variety of the diſeaſe, bliſters ſometimes prove uſeful; and I have known the irritation removed, and the ſwelling carried off in the courſe of a ſhort time by opiates; but theſe afford only a temporary relief, and do not prevent the diſeaſe from returning on the ſlighteſt application of any of the exciting cauſes which uſually tend to induce it.

The remedies which here prove moſt effectual are cold bathing, and a plentiful uſe of bark. Sea bathing, when the ſeaſon permits, ſhould in the firſt place, be adviſed, but when this cannot be obtained, cold water may be uſed at home, with a proportion of common ſalt diſſolved in it. It anſwers a good purpoſe whether the whole body be immerſed in it, or merely the ſcrotum bathed in it, but for the moſt part, I have thought that it proves moſt effectual when applied to the ſcrotum only. As bark and cold bathing act upon the ſame principle, that is, by giving tone and vigour to parts which we ſuppoſe to have been deprived of them, they may either be uſed together, or exhibited ſeparately, as the patient may incline.

The teſtes, we find, are apt to decay. One of them will begin to leſſen in bulk, and, in a gradual manner, will diſappear entirely, or leave only a thin membranous ſubſtance in its place. Generally the other remains ſound; but I have known inſtances of both becoming affected at the ſame time, and others where the one remained entire as long as any part of that which was firſt affected was perceptible, but where it alſo began to decay as ſoon as the other was entirely deſtroyed.

This affection occurs at all periods of life, but moſt frequently after the 40th year. In many inſtances, no cauſe whatever can be aſſigned for it; but I have obſerved that it is moſt frequent in people of delicate conſtitutions, where the muſcles are ſoft and relaxed, and the complexion wan and ſallow. I have alſo found that

thoſe in whom it occurs, have, in almoſt every inſtance, been in early life particularly addicted to Onaniſm.

In a few caſes it has appeared as an evident conſequence of a ſwelled teſticle. On the fullneſs produced by the diſeaſe being removed, the proceſs of abſorption by which this was accompliſhed does not ſtop, but goes on till the whole teſtis is carried off. In ſome inſtances this takes place while the teſticle continues to the laſt of its natural degree of firmneſs, or even while the hardneſs ſtill prevails which occurred during the ſtate of inflammation by which the ſwelling was at firſt induced: but, in others, before this waſting proceſs commences, the teſticle becomes ſoft and pulpy, or even diſſolves into a fluid. It is ſeldom attended with pain, the patient being, in many inſtances, ignorant of his loſs till one, or perhaps both, teſtes are nearly conſumed.

Hitherto no certain remedy has been diſcovered for putting a ſtop to this complaint. Mercury, hemlock, and electricity have been tried, but with no advantage. The cold bath has for a time ſeemed to prove uſeful, but the diſeaſe returned again, and both teſtes were diſſolved. In one caſe, where one of the teſtes was conſumed before the patient perceived it, and where the other was evidently affected, I applied a bliſter over it. This waſting proceſs ſtopped, and never recurred again. The patient is about 36 years of age. His inclination and powers of propagation, he ſays, are ſtill as ſtrong as they were before, and he has lately had a child.

SECT. VII.

Of Swellings of the Spermatic Cord.

THE Spermatic Cord is liable to ſwellings of different kinds, but it is ſuch only as proceed from Gonorrhœa that we are here to notice.

It ſometimes happens that inflammation of the teſticle ſpreads to the cord, and excites pain and tumefaction

along the whole courſe of it. At other times the cord inflames without any previous affection of the teſtis; it becomes tenſe, hard, and painful. The ſwelling, for the moſt part, is at firſt confined to the vas deferens, but at laſt the other parts of the cord ſuffer alſo.

I have met with ſome in which one or two tumified parts were perceived in the courſe of the cord, while the reſt of it remained ſound; but, in general, the cord is equally affected, from the teſtis along its whole courſe up the groin.

On the firſt approach of this diſeaſe, as it is always accompanied with pain and tenſion, with ſome inability to walk, the patient is induced to treat it with attention; but, where the ſwelling is not ſoon carried off, the pain will ſometimes abate, or even vaniſh altogether; and in this ſtate, where the tumour is not conſiderable, the patient is led to ſuppoſe that no harm can ariſe from it; by this neglect the ſwelling is often rendered ſo firm and hard that no remedies we can emply have any influence in removing it. In ſome caſes I have met with a hard ring, affecting the cord only at a particular ſpot, where the diſeaſed part was nearly as firm as bone, while the reſt of it was in a ſoft natural ſtate.

While the tumour is confined to one part of the cord I have ſeldom known it increaſe to any alarming degree, but whether it be circumſcribed, or extended over the whole length of the cord, no time ſhould be loſt in the application of remedies for removing it. Independent of other reaſons, if the vas deferens be chiefly affected or even only compreſſed in its courſe, the teſticle will be rendered as certainly uſeleſs as if it were extirpated: even this, in ſome inſtances, where one ſide only was affected, has appeared to render the patient impotent, and it will never fail to do ſo where the diſeaſe affects both ſides.

The remedies that prove moſt effectual here are bloodletting, bliſters, and ſuch others as are uſually employed with advantage in ſwellings of the teſtis. Theſe we need not particularly enumerate, as they were fully treated of in the laſt ſection; but it may be proper to remark that

blood-letting proves chiefly uſeful on the firſt approach of the diſeaſe, and in this ſtate, when properly applied, that it ſeldom fails in removing it. It may, in ſome caſes, be neceſſary to take blood from the arm, but the local diſcharge of it by leeches applied to the part affected, is at all times to be more depended on.

Where the diſcharge of blood, however, does not ſoon leſſen the ſize and hardneſs of the tumour, we need not afterwards expect any advantage from it. In this caſe I have repeatedly known bliſters prove uſeful when applied along the courſe of the cord; but neither are they to be depended on if ſome effect be not ſoon perceived to reſult from them.

In partial affections of the cord a ſmall bliſter applied to the diſeaſed part, and the part kept open with ointment of cantharides, has tended to reduce the ſwelling.

Mercury is commonly employed here, and where the diſeaſe does not ſoon yield to blood-letting and bliſters, it is perhaps the only remedy from which any advantage is to be expected; but I have commonly found, where the ſwelling has been carried entirely off by mercury, that there has been much cauſe to imagine that the patient at the ſame time laboured under Lues Venerea. In ſome caſes, the diſeaſe has ſubſiſted in an evident form of pox in other parts of the body, while, in others, there was only grounds for ſuſpicion. In all of theſe the mercury ſeemed to operate with more certainty when a decoction of mezereon and ſarſaparilla was conjoined with it.

Mercurial frictions prove more uſeful here than any other mode of giving the remedy, and the application of mercurial plaſters to the ſwelled parts acts with more advantage in ſwellings of this kind than in any other in which I have employed them.

SECT. VIII.

Of Swellings of the Lymphatic Veſſels of the Penis.

WE know, from the hiſtory of the Lymphatics, that they ſerve to inhale, and to carry into the general courſe of

the circulation, not merely from the ſurface of the body, but from every other part of it, fluids applied to their open extremities. In this manner they remove from ſome parts what might prove hurtful if allowed to remain, and they carry into the conſtitution from others what is obviouſly meant for the nouriſhment and ſupport of it. But while this is their chief purpoſe, we alſo know that they carry into the ſyſtem what often tends to deſtroy it. They ſeem to have no power of rejecting what proves hurtful, hence they imbibe poiſons, and the moſt inoffenſive articles, with equal readineſs. All our contagious diſeaſes are probably produced through the medium of the lymphatics, and we can prove by experiment that this is the caſe with many of them; particularly with the plague, the ſmall-pox, and Lues Venerea. So readily is the matter of theſe diſeaſes abſorbed by the lymphatics, that it can never with ſafety be applied to any part of the body; for ſo quickly does abſorption, in ſome inſtances take place, that we have frequent proofs of infection being carried into the conſtitution, even after much pains has been taken to waſh away the matter by which it was produced, in the ſpace of a minute or two after being applied to the ſurface of the body.

For the moſt part we find that the lymphatics themſelves do not immediately ſuffer by the abſorption even of the moſt noxious matter. They will convey the poiſon of a viper and other ſerpents to the courſe of the circulation, by which the animal will be killed in the ſpace of an hour, while no veſtige of its effects appears in the lymphatic veſſels themſelves. In like manner, the matter of Lues Venerea paſſes into the conſtitution from the penis, without any ſwelling or other mark of diſeaſe being perceived in the lymphatics through which it was conveyed.

This, we muſt allow, however, is not univerſally the caſe. Inſtances ſometimes happen of the matter of Lues Venerea paſſing through lymphatics that are hard and ſwelled, but we know from daily obſervation that it is not a frequent occurrence. We find, indeed, that the lymphatic veſſels in every part of the body are apt to

swell and inflame on causes capable of exciting irritation being applied to them. Thus we often observe the lymphatics of the arm swell, become hard and painful from a prick in one of the fingers with a pin or a thorn, or even from a nail being cut too far in the flesh; and in Gonorrhœa it is by no means uncommon to find a hard lymphatic passing along the back of the penis, to the groin, arising in some instances from the prepuce and in others from the urethra. But although this, as we have observed, occurs also in some cases of Chancre, we meet with at least twenty instances of the contrary, for one in which this affection of the lymphatics takes place. I think, too, that I have observed, where the lymphatics proceeding from Chancres have inflamed, particularly where the inflammation has been considerable, that the constitution has not been so apt to suffer as where this did not happen. From all which, I would conclude, that inflammation of the lymphatics, when in a high degree, instead of indicating an increased power of absorbing what is applied to them, as many have imagined, tends in a great measure to lessen, and, perhaps to destroy it. Till the fact is farther ascertained, which experience and observation alone can do, it would be improper to place any dependence upon this in the treatment of Chancres. In all cases of Chancre, whether the lymphatics inflame or not, it would be imprudent to omit whatever might tend to render the constitution safe; but finding that much inflammation seems not only to lessen the power of absorption in the lymphatics, but that they inflame from causes in which we know that no infection exists, as often happens from a prick or a cut with a clean instrument, we would from this alone be led to think that this affection of these vessels which occurs in Gonorrhœa, proceeds more from irritation than from any other cause. This idea, however, is farther confirmed by the proofs we have already adduced of Gonorrhœa being a local disorder, as well as by our daily observation of the rise and progress of these swellings which occur in this disease. They commence with all the usual symptoms of inflammation. A hard string, or cord, is perceived along

the back of the penis. It is painful to the touch, and the teguments above it ſometimes acquire an eryſipelatous redneſs. The whole penis becomes ſtiff and uneaſy, and this renders erections particularly painful.

In a great proportion of caſes the inflammation ſubſides quickly and eaſily, the ſtiffneſs and pain gradually abate, and the hardneis of the lymphatic diſappears entirely: but where the inflammation has either been ſevere from the firſt, or not properly treated, it proceeds in ſome caſes to ſuppuration, forming one or more ſmall abſceſſes in the courſe of the affected part. The ſores, however, which enſue from theſe, heal readily, when the conſtitution is otherwiſe healthy, forming a very manifeſt difference between Gonorrhœa and Lues Venerea. Similar affections of the lymphatics which occur in the latter, requiring, for the moſt part, a courſe of mercury to remove them. I ſay for the moſt part only, from having met with more than one inſtance, of the ſores which occur in Lues Venerea from this cauſe, healing without the uſe of mercury; and which has induced me to think, that even in this diſeaſe, the lymphatics may ſwell and inflame, merely from the acrimony of the matter, and that this inflammation may have ſome tendency, as I have obſerved above, to prevent the matter from paſſing into the conſtitution.

Where ſwellings of this kind in Gonorrhœa are confined to the lymphatic veſſels, I have commonly found that cold poultices, prepared with crumbs of bread, and acetum lythargirites, or ſaccharum ſaturni, prove more effectual than any other application. They remove the ſwelling and hardneſs, and leſſen the pain with more certainty, than warm emollient poultices. But where the inflammation ſpreads over the penis, as it ſometimes does, it becomes neceſſary, not only to diſcharge blood from the arm, but to apply leeches over the pained parts. This, with a low diet, and confining the patient to a horizontal poſture, very ſeldom fails in removing the diſeaſe. But it ſometimes happens, either from the neighbouring parts becoming ſeverely inflamed, or from the diſeaſed lymphatic burſting, that effuſions occur in the

contiguous cellular ſubſtance, and ſmall abſceſſes forming, they at laſt diſcharge their contents, and produce ſuch ſores as I have already had occaſion to mention.

The treatment of theſe ſhould be the ſame as that of ſores proceeding from any other cauſe in which the conſtitution is not affected. When their edges are hard and inflamed, emollient poultices will prove uſeful. For the removal of ſloughs and foulneſs, red precipitate, or even cauſtic, may be neceſſary; and for cicatriſing them, nothing anſwers better than unguentum e calce zinci, or ceratum e lapide calaminaire*.

In two different inſtances of hardened lymphatics in Gonorrhœa, beſides the firm cord on the back of the penis, a thin, flat, hard tumour, proceeding from this cord, ſpread round the whole ſubſtance of the penis, for the breadth of a quarter of an inch. One of them was contiguous to, and immediately behind the glans. The other was near to the pubes. This laſt paſſed round the urethra, which it graſped ſo firmly, as to give cauſe to ſuſpect, that at laſt it might prove a total obſtruction to the urine. A courſe of mercury was tried in each of them, without any advantage. A ſmall piece of mercurial plaſter was then applied over the ſwelling, and this, with a gentle purgative of ſea-water every ſecond or third morning, was all that was adviſed. The ſwelling in each of them became conſiderably leſs, but never diſappeared entirely. It did not, however, give any diſturbance afterwards.

SECT. IX.

Of Swellings of the Glands in the Groin.

THE ſwelling and inflammation of the lymphatics, deſcribed in the laſt ſection, frequently proceeds no farther than the root of the penis. At other times it goes

* Vide Appendix, No. xlvii. xlviii.

the length of the groin, and affects one or more of the contiguous glands, which become hard, swelled, and inflamed, putting on many of the appearances of the venereal bubo.

At other times these glands swell and inflame, where no affection of the contiguous lymphatics is perceptible. But although in such cases, no apparent inflammation occurs in these vessels, there is, however, much cause to imagine, that in a certain degree it always takes place. There is not, at least, any other obvious route by which the inflammation can be conveyed from the urethra to the glands in the groin.

In some cases these swellings become large, and, notwithstanding our endeavours to prevent it, suppuration at last takes place: but, for the most part, if they be not neglected at first, they may be very easily discussed. In most instances, this may be accomplished by the use of saturnine poultices alone; but where the pain and inflammation are severe, blood-letting, both general and local, becomes necessary. Laxatives always prove useful, and a cooling, low regimen can seldom be dispensed with.

The most perplexing part of the surgeon's practice here is, to determine the real nature of the tumour; to ascertain whether it proceeds merely from inflammation, or from the absorption of venereal matter. If from the last, mercury alone will prove effectual; while no practitioner would consider mercury as necessary, for the removal of a swelling altogether inflammatory. Neither would it, in this case, answer any good purpose. It would not lessen the size of the swelling: nay, by the fever which it sometimes excites, it might even tend to increase it, and disappointment to the practitioner, and much distress to the patient, might be the consequence.

The circumstances upon which we chiefly form our judgment here, are these: if no chancre or excoriation has been perceived, either upon the glans or prepuce, and if the inflammation in Gonorrhœa has been considerable, there will be cause to imagine that the tumour is not venereal. When treating of chancre and venereal

bubo, we ſhall enter more fully into the conſideration of this; but at preſent, I may obſerve, that buboes do not commonly occur, without chancres going before them. I know, indeed, from various caſes which have fallen under my management, that, contrary to the general opinion, real venereal buboes ſometimes form without any previous chancre, or any external affection; but as it does not happen once in a hundred inſtances, we are ſufficiently warranted in conſidering the abſence of chancre, as a reaſon for ſuppoſing that ſwellings of this kind are not venereal.

In ſuch ſwellings as occur from Gonorrhœa, much pain and tenſion prevail, not merely in the diſeaſed glands, but over all the groin; and a general ſympathetic uneaſineſs ſpreads over the thighs, and under part of the abdomen. Even the teſtes and abdominal viſcera ſometimes ſuffer, whereas, in the venereal bubo, it is commonly one gland only that it affected, and the contiguous parts ſeldom become uneaſy till the diſeaſe is far advanced; not, indeed, till the tumour has acquired ſuch a ſize, as to excite pain ſolely by diſtention. The ſwelled gland, it is true, is painful from the firſt, and the pain becomes gradually more ſevere as the tumour increaſes; but the pain is chiefly confined to one part, and ſeldom ſpreads farther till the teguments are much ſtretched by the ſubſequent formation of matter. And, laſtly, when glands ſwelled from this cauſe burſt, the ſores which enſue have a very different appearance from thoſe produced by real venereal buboes. Their edges, inſtead of being hard and retorted, have more the appearance of ſores which occur from common abſceſſes, and they ſoon begin to heal, even when mercury is not employed, which the others, we may obſerve, ſeldom do.

This circumſtance of theſe ſores healing, whether mercury be uſed or not, is the moſt deciſive characteriſtic of their true nature, and when any doubts of this are entertained, either from the ſwelling having taken place without a previous chancre, or from any other cauſe, we ought to delay the exhibition of mercury till their

tendency to heal, or to degenerate into a worſe ſtate, be aſcertained.

If they put on a healing appearance, and gradually become leſs, there will be much cauſe to hope that a complete cure will be obtained, whether mercury be uſed or not; while, on the contrary, this remedy ſhould be immediately adviſed when the ſores become foul, and their edges hard; and particularly when, inſtead of healing, they extend to a greater ſize.

The progreſs of the ſwelling alſo affords a mark of diſcrimination. The venereal bubo proceeds more ſlowly to ſuppuration than the inflammatory ſwelling of which we now ſpeak, which moſt frequently, indeed, is eaſily diſcuſſed, and ſeldom arrives therefore at the ſtate of abſceſs; but when tumours of this deſcription do ſuppurate, it commonly happens in the ſpace of a few days. I have known matter completely formed in them in three or four days from their firſt appearance; a circumſtance which perhaps never happens in glandular ſwellings produced by the matter of Lues Venerea.

SECT. X

Of Excoriations of the Glands and Prepuce.

BY the acrimony of the matter in Gonorrhœa the Glans and Prepuce are ſometimes excoriated. A ſlight degree of inflammation takes place at firſt, either partially, or over the whole parts; and this being ſucceeded by a diſcharge of matter, the ſkin at laſt becomes fretted, and on being examined with a glaſs, the matter is perceived to flow from an infinite number of ſmall points, on the ſmalleſt preſſure being applied to them.

But, for the moſt part, this affection of the prepuce and glans takes place without any diſcharge from the urethra. In the courſe of a few days after connexion with an infected woman, and without any ſymptom of Gonorrhœa, a ſenſation of heat is perceived over the

whole prepuce and glans, which ſoon terminates in a diſcharge of matter very ſimilar to what comes from the urethra in Gonorrhœa. From this circumſtance, the diſeaſe has been termed Gonorrhœa Spuria. The matter indeed, is ſo ſimilar to that of Gonorrhœa, that it is uſually ſometime before the patient can be convinced of its not coming from the urethra. It not only reſembles the matter of Gonorrhœa in colour and conſiſtence, but likewiſe in quantity. In ſome caſes, it is ſurpriſingly great, owing to the great extent of inflamed ſurface, in the numerous plies and doublings of the ſkin forming the prepuce.

In ſlight affections of this kind, the prepuce continues to move upon the glans as it does in health; but when the matter is either of itſelf particularly acrid, or allowed by want of attention to remain till it becomes ſo, the ſkin forming, the prepuce becomes ſo much inflamed and ſwelled, that it cannot but with much difficulty be made to paſs backward and forward. In ſome caſes this becomes impoſſible. If this happens when the prepuce covers the glans and cannot be drawn back, a diſeaſe is thereby produced, which we term phymoſis; and when the ſwelling takes place when the prepuce is retracted and cannot be pulled over the glans, the diſeaſe is termed paraphymoſis. Of theſe affections we ſhall ſpeak more particularly in the enſuing ſections.

By many, this diſcharge of matter from the prepuce and glans has been judged to be venereal; that is, they have ſuppoſed it to be produced by the matter of Lues Venerea. They therefore conceived it to be always connected with an affection of the conſtitution, and have accordingly, in the method of cure, been chiefly directed by this opinion,

This opinion, however, is evidently not well founded. From much obſervation, I am convinced, that this diſcharge is of a local nature, and that it is no more capable of affecting the conſtitution than the matter of Gonorrhœa. I believe indeed that this is now very generally admitted; and that it is thoſe only who doubt

of it, who, taking their information from books, have not paid that attention to the event of thoſe affections, which in forming a judgment of them is abſolutely neceſſary. It will be univerſally found that the diſcharge may be more eaſily removed by remedies applied directly to the parts affected than by mercury, or any medicines, given internally. Indeed, no advantage is derived from the internal exhibition of medicines, while the diſeaſe ſeldom reſiſts the application of an aſtringent waſh: neither is the conſtitution ever affected with pox from excoriations proceeding merely from Gonorrhœa.

It is true that buboes and ſymptoms of pox ſometimes occur where the prepuce and glans have been previouſly affected in this manner. Of this I have ſeen many inſtances: but in all of theſe it has happened, that on enquiry, the patients were found to have had connection with diſeaſed women during the continuance of the excoriation; and whatever may be the opinion of ſome individuals upon this point, I believe few will doubt of an ulcerated or excoriated ſurface being particularly favourable for promoting the abſorption of any matter that is applied to it; inſomuch, that it is the univerſal remark of patients, that they never eſcape being poxed, if in ſuch circumſtances they have connection with women that are infected.

It is worthy of remark, that a ſmall, partial excoriation is always at firſt of a ſuſpicious nature, while from any obſervation I have been able to make, every general affection of this nature, where the excoriation extends over the whole prepuce and glans, terminates eaſily without producing any conſtitutional taint. The diſeaſe ſometimes at firſt, indeed, occupies a ſmall ſpot, and afterwards extends gradually over the contiguous parts, and where, by the event, we judge of its being of the moſt innocent nature from no diſeaſe of the conſtitution being produced by it. But I have uniformly found, where a ſmall part only has remained for ſome time a raw and excoriated, without extending to the ſurrounding parts, that ſymptoms of pox ſucceed to it with as much certainty as they ever do to chancres.

I therefore believe, that all partial affections of this kind, which remain for more than a day or two circumſcribed, are produced by the matter of Lues Venerea, and that they ought accordingly to be treated as ſymptoms of that diſeaſe. Beſides the other differences which we have elſwhere enumerated between the matter of Lues Venerea and Gonorrhœa Virulenta, it would appear that in this they differ in the moſt obvious manner. The matter of Lues Venerea, however diffuſible it may be when received into the ſyſtem, from which indeed it is never expelled but with the aſſiſtance of mercury, is always ſlow in its progreſs while only locally applied either to the penis or any other part. Neither can it be applied, as we have already had occaſion to remark, to the ſmalleſt point, without much riſk of pox being produced by it: whereas, the matter of Gonorrhœa, whether it be applied to the urethra, to the glans, or prepuce, ſpreads quickly over all the contiguous parts; while it is obvious to daily obſervation, either that it is not abſorbed, or if it be taken into the ſyſtem, that no conſtitutional diſeaſe enſues from it.

Excoriations of this kind not only reſemble Gonorrhœa, in being produced by the ſame matter, and in being entirely local, but in the method of cure. We have already had occaſion to ſee, that the diſcharge in Gonorrhœa cannot be certainly removed, but by the uſe of aſtringent injections. In like manner, bathing the parts affected in aſtringent ſolutions proves the moſt effectual practice here. Lime-water anſwers particularly well for this purpoſe: alſo ſolutions of ſaccharum ſaturni, and of white vitriol: immerſing the parts in brandy, or in a ſtrong infuſion of red-roſe leaves, will ſometimes remove the diſcharge on the firſt application. It is proper, however, to remark, that the more frequently remedies of this kind are applied, the more effectual they prove. They ſhould be uſed at leaſt five or ſix times daily, and for the ſpace of a few minutes at each application.

Emollient ointments are frequently employed in affections of this kind, but the very cauſe which renders

aſtringents uſeful makes every application of this nature improper. They conſtantly increaſe the diſcharge, while no advantage of any kind accrues from them.

Neither do we find that purgatives, or any of the cooling medicines uſually preſcribed here are of any real utility. When much inflammation takes place, they may, in ſome inſtances, prove uſeful, but in all ſuch caſes blood-letting is more to be depended on; particularly the application of leeches to the parts immediately affected, which, in all local inflammatory complaints, is to be conſidered as the moſt effectual remedy.

It has been objected to the application of leeches in excoriations of the penis, that the wounds from the bites of theſe animals are apt to degenerate into venereal ſores. This proceeded upon the idea of all ſuch affections being produced by the matter of Lues Venerea; but now when we know that this is by no means the caſe, it is obvious that the opinion muſt be ill founded; and from various and repeated trials of the remedy in queſtion I can decidedly ſay that it is ſo.

But admitting that a caſe ſhould occur, in which it might be doubtful whether the excoriation and ſwelling was truly venereal or not, ſtill I would not heſitate in adviſing the application of leeches: they would prove more effectual than any other remedy in carrying off the inflammatory ſymptoms, while their bites, if they ſhould put on the appearance of venereal ſores, would immediately render the nature of the diſeaſe certain, which otherwiſe might long have remained in doubt.

In all ſores and inflammatory affections of theſe parts, the poſture of the body and poſition of the penis are circumſtances requiring particular attention. The patient ſhould be kept as much as poſſible in a horizontal poſture; and the penis ſhould be elevated ſo as to prevent the glans from hanging pendulous. It often happens indeed, where this is omitted that ſwellings remain obſtinate for many weeks together, which otherwiſe might have been carried off in a few days.

SECT. XI.

Of Excoriations in the Parts of Generation of Women.

THE parts of Generation in Women are liable to excoriations of a ſimilar nature with thoſe enumerated in the laſt ſection. In ſome caſes they are confined to the clitoris, nymphæ, and labia pudendi. In others they ſpread to the perineum, and even to the groins and thighs, where, from negligence, and want of attention to cleanlineſs, I have known deep and very extenſive ulcers produced.

Where the excoriations are confined within the parts of generation, the ſymptoms are nearly ſuch as occur from Gonorrhœa in the uſual form of the diſeaſe; but where the inflammation and rawneſs ſpread to the thighs, a great deal of diſtreſs is experienced in walking, and in every motion of the body.

The method of cure is nearly the ſame in women as in men. Bathing the parts frequently with one or other of the aſtringent applications mentioned in the laſt ſection, for the moſt part, proves effectual; for the excoriated parts ſeldom lie ſo deep as to require the uſe of the ſyringe; but when the parts become evidently ulcerated, bathing alone is not ſufficient. In this caſe the ulcers fall to be treated in the ſame manner with ſores proceeding from any other cauſe. When they are foul and flougny, an ointment ſtrongly impregnated with mercur. precipit. rub. is perhaps the beſt application we can uſe; and for the purpoſe of healing them, nothing anſwers better than common cerate, with a large proportion of lapis calaminaris, or unguentum e calce zinci, for which preſcriptions are given in the Appendix.

When ſores of this deſcription do not ſoon yield to theſe applications, and eſpecially when they ſpread and become deeper while the patient is uſing them, there will be ſome cauſe to ſuſpect that a venereal taint exiſts in the conſtitution: in which caſe a courſe of mercury ſhould

immediately be adviſed being the only remedy upon which, in ſuch circumſtances, we can place any dependence.

SECT. XII.

Of the Phymoſis and Paraphymoſis.

IN ſection tenth we found it neceſſary to give a definition of theſe two diſeaſes. Inflammation of the preputium always excites ſome degree of thickneſs and contraction. When the contraction occurs while the prepuce covers the glans, and in ſuch a degree as to prevent it from being pulled back, the diſeaſe thus produced, is termed phymoſis. We ſay that paraphymoſis takes place when the prepuce contracts behind the glans, and cannot be drawn over it.

One of the moſt frequent cauſes of phymoſis is chancres on the preputium. The thickening of the ſkin induced by chancres, and the inflammation with which they are apt to be attended, is often productive of phymoſis; but it alſo occurs from other cauſes. Whatever excites much inflammation of the penis will induce it. Hence it readily occurs in every caſe of Gonorrhœa attended with any unuſual degree of inflammation, particularly in the variety of the diſeaſe, where the glans and prepuce are inflamed and excoriated. But although theſe excoriations often terminate in phymoſis, it is certain that they are more frequently productive of paraphymoſis. The patient, in clearing away the matter neceſſarily draws back the preputium, and when the parts are previouſly much inflamed and thickened, they are apt to contract ſo ſuddenly when in this ſtate of retraction, that they cannot again be drawn over the glans.

In the treatment of phymoſis, we are often ſucceſsful by a proper application of emollients. No effect will reſult from them when the ſtricture has been of long duration; but, unleſs the inflammation is unuſually ſevere,

they will often anſwer if duly perſevered from the firſt. Immerſing the penis, from time to time, in warm milk, or in a decoction of althea root, or of lintſeed, is perhaps, the moſt effectual method of applying remedies of this kind; and when much matter is produced between the prepuce and glans, either by chancres or inflammation, theſe liquids ſhould be injected from time to time with a ſyringe. But with a view to leſſen the diſcharge, after waſhing out any matter that may be formed, a weak ſaturnine ſolution ſhould be injected three or four times a day. This, with a low diet, abſtinence from exerciſe, and ſuſpending the penis, will, for the moſt part, prove ſucceſsful; but when the parts are much inflamed, it becomes neceſſary to take blood in quantities proportioned to the ſymptoms, not merely from the arm, but from the penis itſelf, by the application of leeches, which may always be done with ſafety where the diſeaſe is local, as we have ſhown to be the caſe where it proceeds from excoriation or from Gonorrhœa: but when it occurs from chancres, as venereal ſores are apt to enſue from the bites of leeches, it is better to omit them.

While any conſiderable degree of ſtricture remains, it is always improper to force the prepuce back. This, however, is often done, but it very commonly terminates in paraphymoſis; for when the parts are much contracted it is almoſt impoſſible to get the prepuce again brought over the glans, if it has once been forced completely behind it. It is better, therefore, to wait till the ſtricture is intirely removed, before any attempt is made for this purpoſe. Beſides the riſk of inducing paraphymoſis, the irritation which it gives, tends always to render the ſtricture more obſtinate. When the inflammation is altogether gone, it may be proper, after immerſing the penis in any of the emollients abovementioned, and rubbing it gently over with warm oil, to endeavour, from time to time, to ſtretch it to its uſual extent; but even at this period of the diſeaſe the prepuce ought never to be puſhed back with ſuch force as can excite any kind of uneaſineſs.

In the treatment of phymosis it is proper to remark, that, in a great proportion of cases the stricture can never be altogether removed. In slight degrees of it we commonly succeed by the means I have mentioned, but whenever it is severe the parts remain under some degree of contraction, for the most part, during the life of the patient. We have it indeed in our power to remove even the most inveterate stricture that occurs, by laying the prepuce open, either by a partial incision, or cutting it from one end to the other, according to the extent of the disease, but this is a remedy of too severe a nature for the removal of phymosis, in the ordinary form of the disease. Where the prepuce is so much contracted as to interrupt the passage of urine, or to impede coition, it no doubt becomes proper to lessen or remove the stricture, but it is most frequently for obtaining ready access to concealed chancres that we advise this measure of laying the prepuce freely open.

Even chancres are often cured while the prepuce remains contracted; but this is only the slighter kinds of them. Whenever they are either deep or very extensive, although with much care and attention they may in some instances be cured, yet we are much more certain of effecting our purpose, and of doing it speedily, by laying the sores completely open. I am clearly of opinion, however, that a patient should rather submit to an ordinary or slight degree of phymosis, where there is no disease concealed by it, than incur the pain and distress which must always ensue from this operation. Many have it from their birth, and are not sensible of any inconvenience arising from it.

It happens, indeed, in some instances, even of this natural phymosis, if we may so term it, that we are under the necessity of removing the stricture by an incision. This is particularly the case where the exsudation natural to these parts is in such quantities as to excite irritation, which it is always apt to do when it adheres to the prepuce and glans. By much pains in washing with a syringe, the parts may be kept so clean as to prevent them from suffering with this mucus; but in general we find

it neceſſary either to lay the contracted prepuce open from one end to the other, or remove a portion of it entirely, ſo as to perform the operation of circumciſion.

It may be proper to obſerve, that although this operation of removing a portion of the prepuce is in itſelf exceedingly ſimple and eaſy, and never fails to anſwer the purpoſe where the parts are perfectly ſound, that it is very apt to diſappoint us entirely when they are under any degree of inflammation or irritation. In this ſituation, although the parts in which the ſtricture is ſeated be completely removed, the remaining extremity of the prepuce contracts almoſt immediately after the operation, ſo as to create nearly the ſame degree of inconveniency which it did before. By the introduction of doſils of lint, ſponge tent, and other ſuch articles, we may for a time prevent the contraction from becoming conſiderable, but the irritation which theſe applications excite, at laſt oblige us to lay them aſide, when the ſtricture ſoon takes place in a degree equal to what it was before the operation.

I have taken the more particular notice of this, from different caſes having fallen under my management, in which, by endeavouring to remove a contraction of the prepuce by the operation of circumciſion, we were completely diſappointed. In three of theſe the operation was done by others. In one I performed it myſelf. But although every thing was done in all of them that might probably render them ſucceſsful, yet they all failed, and after a conſiderable time ſpent in trying to dilate the newly-formed ſtricture, I was in two of theſe inſtances obliged to perform the operation for the phymoſis in the uſual way, by making a longitudinal cut through all the remaining part of the preputium. In one the ſtricture was not ſo conſiderable as to render it neceſſary, and in the other, the patient would not ſubmit to it.

Were we to remove the prepuce entirely, by diſſecting it completely away from that part of the penis where it begins to be formed by an elongation or production of the ſkin, the operation might probably anſwer our expectation, but it would leave the glans altogether un-

covered, which in thoſe who have been accuſtomed to have it protected by the prepuce, is apt to excite very diſagreeable ſenſations. Neither can I determine with certainty whether it would, in every caſe, anſwer the purpoſe of giving complete relief or not. Where the parts are previouſly in a ſtate of irritation, the remaining ſkin might contract behind the glans, ſo as to produce ſome degree of paraphymoſis; at leaſt, in one of the four caſes to which I allude, a very conſiderable portion of the prepuce was removed, and yet the remainder contracted in ſuch a manner as to form a ſtricture which gave much diſtreſs.

Different methods have been propoſed for performing the operation of a phymoſis. For theſe the writers on chirurgical operations muſt be conſulted, but the eaſieſt, and perhaps the ſimpleſt of any, is that which I have deſcribed in the ſyſtem of ſurgery*, in which the inciſion is made by paſſing a ſharp pointed biſtoury along a directory between the prepuce and glans, and having puſhed the point of the biſtoury through the prepuce near to where it begins to form, the cut is completed by drawing the inſtrument forward; in which manner it is done, not only more neatly, but with more expedition, and with much more eaſe to the patient than in the uſual way of cutting the prepuce from before backwards. In this manner the inciſion is always made at different ſtrokes, by which the cut is apt to be ragged and unequal, whereas in the other it is done at once, and in any direction that the operator may incline.

Some adviſe the inciſion to run on the ſide of the penis, and others along the back of it. The difference in general is not material, but the former appears to me to be preferable, from the matter either of the cut itſelf, or of concealed chancres not being ſo apt to lodge between the prepuce and glans, as when the inciſion is made on the back of the penis. It is proper, however, to obſerve, that there are two circumſtances, which in this operation, require particular attention: the large

veins of the penis ſhould be avoided, and when chancres are preſent, the cut ought to run as near to them as with propriety it can be made, ſo as to admit of the eaſy application of proper dreſſings.

In the treatment of the parts after the operation, ſome attention is neceſſary to prevent the edges of the divided prepuce from adhering to the glans. I have known a good deal of inconvenience produced by this being overlooked, and it is eaſily prevented by inſerting a ſmall pledget of lint between the prepuce and glans at each dreſſing.

Paraphymoſis may happen either from a ſtricture of the prepuce, from a ſwelled ſtate of the glans penis, or from a combination of both.

When it appears to depend, either altogether or chiefly, on a contracted ſtate of the preputium, the ſame applications ſhould be made to it which we adviſed for the phymoſis. By the uſe of warm emollients the ſtricture, when in a ſlight degree, maybe ſofar removed, as to admit of the prepuce being drawn over it. After immerſing the penis for a few minutes in warm milk, and rubbing the contracted parts with any emollient ointment, we may ſometimes ſucceed by applying the fore and middle finger of each hand behind the contracted part of the prepuce, and pulling it gently forward, while, with the thumb of each hand placed upon the glans, we puſh it firmly backward. This I have done in different inſtances, which otherwiſe would ſoon have ended in ſtrictures of the moſt confirmed kind. It muſt, however, be confeſſed, that it is only in the commencement of the diſeaſe that this, or any other manœuvre of a ſimilar kind, will ſucceed; and there is no room for any ſuch attempt when the diſeaſe proceeds from a tumefied ſtate of the glans.

When the diſeaſe ſeems either to be entirely owing to an enlarged ſtate of the glans, or partly to this and partly to a ſtricture of the prepuce, as ſometimes happens, we may endeavour to relax the preputium by rubbing it with oil, or an emollient ointment; but in ſuch circumſtances it is evident that the application of emol-

lients to the glans would rather do harm. By relaxing the parts affected they would encreaſe the ſwelling. Cold aſtringent applications prove more uſeful, and ought alone to be depended on. In this view we adviſed cloths dipped in brandy, vinegar, and cold water, to be applied to the parts, and poultices, with crumb of bread, and a ſolution of ſaccharum ſaturni in vinegar and water. But when theſe do not ſoon ſucceed in reducing the ſwelling, we are under the neceſſity of removing the ſtricture by an operation, in order to prevent the acceſſion of more ſerious ſymptoms. When too long neglected the glans is apt to mortify, by the contraction of the prepuce putting a ſtop to the circulation of the blood.

This operation conſiſts in making one or more inciſions into the contracted edge of the prepuce. We ſometimes ſucceed by making two or three ſmall cuts in different parts of the ſtricture with the ſhoulder of a lancet. They ought to be carried entirely through the ſkin, and into the cellular ſubſtance, and when they bleed freely they commonly give immediate relief; but it muſt be admitted that theſe ſmall inciſions, however numerous they may be, do not prove ſo certainly effectual as one free cut made completely through the ſtricture. The eaſieſt method of doing this is, by inſinuating the end of a director beneath the ſtricture, and cutting upon it with a ſcalpel. For this purpoſe a ſhort directory ſhould be uſed, with a groove open at the extremity.

The inciſion here does not require any particular attention. The divided veſſels ſhould be allowed to bleed freely. This generally leſſens the pain, while it co-operates along with the removal of the ſtricture in carrying off the ſwelling. Lint, ſpread with unguentum ſaturnium, makes the beſt dreſſing for the ſore.

It muſt be remembered that we are now ſuppoſing that no diſeaſe exiſts in the conſtitution. When either of theſe affections are conjoined with Lues Venerea, as we often find to be the caſe, the patient cannot be rendered ſafe, nor will the ſores produced by the operation heal, without the aſſiſtance of a courſe of mercury.

SECT. XIII.

Of Warts on the Glans and Prepuce, and Labia Pudendi.

THE Glans, Prepuce, and Labia Pudendi, are frequently attacked with warty excreſcences, on the termination of Gonorrhœa. They ſometimes appear during the continuance of the diſcharge, but more commonly at the end of it, when the patient having conſidered the cure as complete, is ſurprized with the appearance of this new ſymptom.

They riſe at firſt in the form of ſmall points, which gradually become larger, and frequently ſo numerous as to cover a conſiderable part of the penis. In men they commonly begin immediately behind the glans, and extend, in the form of a ring, round the whole penis, near to the junction of the glans and prepuce. They afterwards appear indiſcriminately on all the neighbouring parts, but they are uſually more numerous upon the prepuce.

In ſome caſes they are firſt perceived in the urethra. The patient complains of an obſtruction to the flow of urine, and on ſeparating the lips of the urethra, a red, florid excreſcence is obſerved to be the cauſe of it. I have alſo met with productions of this kinds in the urethra of women.

Theſe warts are ſeldom painful; never, unleſs they proceed to a ſtate of ulceration, which, when they do, is always to be conſidered as the fault of the patient. On their firſt appearance they are always firm and entire, but when they become numerous, if they be not regularly cleaned, the moiſture natural to theſe parts becomes acrid, and renders them tender; and this, if it be not prevented by timeous aſſiſtance, ſoon terminates in painful ulcers. Excreſcences of this kind aſſume various forms. For the moſt part they are ſingle, and pendulous, with narrow necks, but in ſome inſtances they have broad baſes; while, in others, a number of theſe ſmaller warts ſprout all from the ſame root, and form excreſcences of une-

qual cauliflower furfaces. When long neglected, as fometimes happens with poor people, they acquire fuch a bulk as to cover the glans entirely; and when in this ftate they become ulcerated, the whole mafs affumes fuch a difeafed appearance, as with thofe not accuftomed to this branch of bufinefs, gives a fufpicion of their being cancerous. Of this I have met with different inftances, where the penis, after being doomed to amputation, has been faved, and the warty excrefcences removed.

It is difficult, perhaps impoffible, to afcertain the caufe of thefe warts. In fome cafes they are obviouſly produced from the cuticle, their attachment being fo flight, that on being removed, the cutis vera is left entire: in others they proceed from the fkin itfelf, but I never obferved them to go deeper than this.

Whatever tends to excite the flow of an unufual quantity of blood to the penis, feems to create a difpofition in thefe parts to formations of this kind: hence they fucceed to various kinds of irritation. We know that they are a frequent conſequence of the venereal irritation, for they often fucceed to chancres; and I have known them in different inftances fucceed to fimple excoriation, where neither Gonorrhœa nor Lues Venerea ever exifted. By whatever cauſe irritation is produced in the prepuce and glans, it feems to excite a difpofition in the fmall blood veffels of the parts to fprout or pullulate, by which thefe warty productions appear to be formed.

As warts on the genitals are a frequent conſequence of chancres, they have been always conſidered as of a venereal nature, whether they are the immediate effects of chancre, Gonorrhœa, or any other cauſe. This opinion, however, is by no means well founded. Warts on thefe parts may, no doubt occur, while Lues Venerea exifts in the conſtitution; and in fuch inftances mercury muſt be given before a permanent cure can be expected. But in a great proportion of cafes, at leaft ninety-nine of a hundred, they appear to be entirely local, inſomuch that remedies acting only upon the conſtitution have no influence whatever in removing them, while

they are for the moſt part, eaſily carried off by a variety of applications, which act ſolely upon the excreſcences themſelves, or rather upon the veſſels by which they are produced. Nay, they are ſo evidently of a local nature, that when they occur in Lues Venerea, although they are very apt to return when removed while the infection exiſts in the conſtitution, yet it is very certain that this diſeaſe of the habit may be completely eradicated without any effect being produced upon them. The warts which ſucceed to chancres commonly remain equally firm and obſtinate after mercury has been given as they were before, and are to be removed by the ſame means as if the conſtitution had never been affected. This, I may obſerve, is a point which in a particular manner merits the attention of practitioners; I mean of ſuch as are not daily verſant in this branch of buſineſs; for while the opinion is retained, as is ſtill the caſe with ſome, of warts on theſe parts being in moſt inſtances connected with Lues Venerea, much miſchief is apt to be done by a great deal of mercury being given where no advantage can even be derived from it. In the treatment of this affection I have known the conſtitution almoſt ruined by one courſe of mercury after another, without any effect upon the warts, and which were afterwards eaſily and ſpeedily removed by remedies applied directly to the parts themſelves.

I have mentioned irritation as a cauſe of theſe excreſcences, but it is only the ſlighter kinds of it that ſeems to produce them. They often ſucceed to a ſlight degree of inflammation, but I have never known them form on parts highly inflamed: on the contrary, much inflammation ſeems to deſtroy the tendency in theſe parts to the production of warts, inſomuch, that our moſt effectual remedies in the cure of theſe excreſcences, and for the preventing a return of them, are ſuch as always excite a good deal of pain and inflammation. They may no doubt be removed more quickly with a ſcalpel or ſciſſars, by tying ligatures of waxed ſilk round them, when they are pendulous, and have narrow necks, but they are more apt to return when removed in this man-

ner, or even when they are deſtroyed with cauſtic, unleſs ſome degree of inflammation has at the ſame time been induced upon the parts. Beſides, ligatures cannot be applied to warts with a broad baſe, which they frequently have; and few patients will ſubmit to the uſe of the ſcalpel for the extirpation of the numerous warts, which in ſuch inſtances for the moſt part prevail.

Inflammation for the purpoſe of removing warts might be excited in various ways: but we neceſſarily prefer that which is the eaſieſt to the patient, and which at the ſame time proves effectual. We ſometimes ſucceed by bathing the warts and contiguous parts three or four times a day with a ſtrong ſolution of curde ſal ammoniac, or of corroſive ſublimate. And a ſolution of mercury in the ſpirit of nitre at the ſame time that it acts upon the warts themſelves as a cauſtic, ſeems alſo, by exciting inflammation in the veſſels of the contiguous parts, to remove or deſtroy the diſpoſition which firſt produced them. Preſcriptions are given for theſe ſolutions in the Appendix, Nos. 39, 40, and 41. The two former may be uſed with freedom, but the ſtrength of the latter renders it neceſſary to apply it with much delicacy and attention. The parts ſhould be merely moiſtened with a pencil dipped in it, nor ſhould this be repeated above once every ſecond or third day.

Tincture of cantharides, applied in this manner, ſometimes anſwers; but we find by experience, that our ſucceſs is more certain from the application of ſuch powders as irritate and inflame the ſkin, than from the uſe of the ſame remedies in a liquid form. Savine in fine powder is one of the beſt for common uſe. Common muſtard, whether of the white or black kind, likewiſe anſwers; and I have known the powder of betony, and of white hellebore, both ſeparately, and mixed in equal quantities, prove ſucceſsful.

If the warts and ſkin lying between them be ſprinkled over with any of theſe daily, a ſufficient degree of inflammation is, for the moſt part, ſoon induced, and we know that it has gone far enough when ſome of the ſmalleſt begin to ſhrivel and drop off. At this time we

ought therefore to desist from any further use of the powder, always taking care to renew it from time to time, if the inflammation subsides before the excrescences are entirely removed. In few instances, the warts sprout up again after they were altogether carried off. When this takes place, the powder should be again applied over the whole seat of the disease, and continued till such a degree of inflammation is induced as the patient can easily bear. They will seldom or never return again, if the parts at this second application of the remedy have been made to inflame sufficiently.

These powders, even in a simple unmixed state, very seldom fail, but in some patients the warts are so firm, and the skin of the prepuce so thick and corrugated, that powders of a more powerfully irritating nature become necessary. In such cases a small proportion of red precipitate, finely levigated, being added to the pulvis sabinæ, commonly answers. Calomel sometimes proves effectual, whether used by itself, or mixed with any of these powders, and a powder composed of equal parts of alumen ustum and mercur. precip. ruber. seldom fails.

Even when warts are seated in the entrance of the urethra, they may be treated in this manner, at least I have often removed them in this situation by the application of these powders, and I never knew any harm produced by them. In one instance when the wart was farther up the urethra than usual, the excrescence was completely removed by the pulvis sabinæ alone, but a considerable degree of pain was induced by it, which ended in a very copious puriform discharge. The urethra became tender and inflamed, through the whole length of it, and the running having all the appearance of the matter of Gonorrhœa, I suspected that a new infection had been communicated. My patient, however, assured me that this could not possibly be the case, as he had not for many months had any connection with women, and there was no cause to doubt his assertion. The running continued for the space of two or three weeks, with all the symptoms of a common clap, and was cured precisely in the same manner, viz. by the use of astringent injections.

SECT. XIV.

Of Gonorrhœa Simplex.

I HAVE endeavoured in different parts of this work to ſhew that the diſcharge in Gonorrhœa Virulenta is the effect of inflammation excited in the urethra and contiguous parts by the matter of infection being applied to them. In the end of the preceding ſection a caſe is mentioned, in which ſymptoms occurred exactly ſimilar to thoſe produced by Gonorrhœa Virulenta from the application of an irritating powder to the urethra; and there is reaſon to ſuppoſe that they may at any time be induced by whatever excites inflammation in any part of that membrane. A puriform diſcharge from the urethra, induced in this manner, and without any connection with an infected perſon having taken place, may be denominated Gonorrhœa Simplex.

We have already had occaſion to ſee that a diſcharge frequently occurs in females, uſually termed fluor albus, which, in particular circumſtances, very much reſembles Gonorrhœa Virulenta*.

In men, we often meet with a diſeaſe exactly ſimilar to this; where a copious diſcharge of matter takes place from the urethra, attended with a ſcalding heat in voiding urine, and all the other ſymptoms of Gonorrhœa, and where there is no ſuſpicion of infection being communicated.

There is nothing more neceſſary than for practitioners to be aware of this, particularly the younger part of the profeſſion, who are apt to ſuppoſe that every diſcharge of matter from the genitals, eſpecially in men, ought to be conſidered as venereal. But although this is undoubtedly true in a great proportion of caſes, yet every practitioner of experience muſt have met with many inſtances of the reverſe, and in which the reputation

* Vide chapter ii. ſection 10.

of the moſt virtuous people might have been ruined, were the diſtinction of which we are now ſpeaking overlooked. I have met with different inſtances of men newly married being ſeized with this ſymptom, in ſome of which, although there was at firſt ſight much cauſe for ſuſpicion and anxiety on the part of the huſband, yet on being informed by a perſon on whoſe judgment they placed confidence, that a running of this kind is not unfrequently induced by other cauſes, and that the diſcharge which had newly taken place, would probably ſhew, by its ending more quickly than Gonorrhœa Virulenta uſually does, that it was of a different nature, they ſoon became leſs anxious, and at laſt were convinced of their fears having been altogether groundleſs.

In like manner, I have in different inſtances been conſulted by women, who, on finding their huſband's linen ſtained with matter, have fancied that they themſelves had been injured by them; and the imagination being once affected, we all know how difficult it is in ſuch matters to ſet it right. I was ſome time ago conſulted by a lady in circumſtances of this kind, who, from the cauſe I have mentioned, had long been reduced to a ſtate of the greateſt diſtreſs and miſery. Her mind was in the firſt place deeply afflicted with the ſuppoſed miſconduct of her huſband; and ſhe was fully convinced that ſhe herſelf laboured under almoſt every ſymptom which attends the venereal diſeaſe. To this ſhe was in a great meaſure lead, by the opinion of a midwife, who unfortunately informed her, that from much experience in matters of this kind, ſhe was convinced that ſhe was poxed, and deſired her to apply to me. Inſtead of this, ſhe put herſelf under the care of one at a diſtance from town, where ſhe reſided, and who, from not having much experience in matters of this kind, was eaſily induced to believe that ſymptoms took place which did not exiſt but in the imagination of the patient. There was no external mark of diſeaſe, but ſhe complained of pains in her bones; ſevere pains in the parts of generation and loins; uneaſineſs in the noſe, throat, &c. In ſhort, ſhe had peruſed a modern treatiſe on the Lues

Venerea, by which she had become acquainted with the symptoms of that disease, almost all of which she now imagined that she laboured under.

A complete course of mercury, besides a variety of other medicines, were given in the country, but no advantage being derived from them, the patient came under my care. It appeared at once that she was diseased in imagination only, for I did not find, on the most minute inquiry, that any symptom of the Lues Venerea had existed from the first. She acknowledged, that at different times, both before and after marriage, she had been much distressed with the fluor albus; but this was the only disease of which she ever complained; and it never was of long continuance.

I endeavoured to convince her that she was perfectly sound, that she never had the disease, and that the matter which she had seen on her husband's linen, and which was the only foundation of her suspicion, was either produced by his connection with her while she was distressed with fluor albus, or by some other cause of a nature equally innocent. All this, however, would have proved ineffectual, but I luckily had an argument in my power which brought conviction along with it, and which, in the course of a few days, made all her symptoms vanish, which otherwise might have been of the most permanent nature. At the very time when she suspected her husband to have given her the infection, he had consulted me by letters, which I preserved, in which he expressed his astonishment at the sudden appearance of a discharge of matter from the urethra, accompanied with heat and uneasiness along the whole course of the passage from the glans to the bladder. He never had been infected with Gonorrhœa, and having had no connection with any other woman than his wife, of whom he could not entertain the least suspicion, he concludes his first letter by enquiring whether or not such symptoms ever originate from other causes than intercourse with an infected person, and at the same time wished that such medicines might be sent to him as would as quickly as possible put a stop to the discharge.

In my anſwer to this, which I alſo preſerved, I mentioned ſeveral cauſes by which a diſcharge from the urethra may be excited, and eſpecially the effect of repeated intercourſe with women labouring under fluor albus, where the diſcharge is more acrid than uſual. I at the ſame time ſent him an aſtringent injection, deſiring that it might be uſed if the diſcharge did not ſoon diſappear. In a ſubſequent letter he informed me, that he had been perfectly convinced by my account of it that his diſeaſe was of an innocent nature; and as a proof of it he mentioned, that it went entirely off in the courſe of eight or ten days, without the injection, or any other remedy, being employed. A ſight of this correſpondence, which I was enabled to ſhew, could alone remove the diſtreſs under which my patient had long laboured.

I have ſince that period had occaſion to know that her huſband has at different times had a return of the diſcharge from the urethra, in ſome inſtances from expoſure to much cold, fatigue, or wetneſs, and repeatedly from connection with his wife when ſhe laboured under fluor albus.

This happened with a patient who never before had any diſcharge from the urethra; but a running is more particularly apt to occur from cauſes of this kind, in ſuch as have been frequently liable to Gonorrhœa Virulenta. I know many of this deſcription who uniformly experience a return of the diſcharge on being expoſed to much bodily fatigue, particularly much riding on horſeback, or jolting in a carriage on a rough road, on their being overheated with wine, or having more connection than uſual even with ſound women.

The irritation excited in the urethra by a ſtone in the bladder will, in ſome inſtances, induce a very copious diſcharge of matter. When this takes place from the bladder itſelf, the matter comes off mixed with the urine, and in no other manner; but when it proceeds from the urethra only, as often happens, it aſſumes all the appearances of Gonorrhœa Virulenta, and paſſes off whether any exertions be made to empty the bladder or not.

We are led to underſtand that people who are much employed in working among the warmer kind of ſpices are very liable to a ſcalding in making water accompanied with a diſcharge of purulent-like matter from the urethra. It is more particularly apt to occur in thoſe who work chiefly among Cayenne pepper: Nay, it has been known to happen from a perſon carrying a few pounds of this article about with him for ſale.

The moſt frequent cauſe of ſtrictures in the urethra is Gonorrhœa Virulenta; but they alſo occur from other cauſes. They have been met with in all periods of life, even where patients have never had any previous diſcharge from the urethra. They are particularly apt to occur in people advancing in years, between the ſixtieth and ſeventieth year of age, and ſometimes later. A perſon who in his youth has ſuffered much with Gonorrhœa Virulenta, is very liable to be attacked about this period with ſtrictures in the urethra, but they likewiſe happen, as I have obſerved above, where no cauſe of this kind can be given for them; and in whatever manner they are induced, they are very conſtantly attended with a plentiful diſcharge of purulent-like matter.

In ſome, theſe ſtrictures have been attended with ſuch a concurrence of circumſtances, ſo ſimilar to thoſe which occur in Gonorrhœa, that the beſt practitioners have at firſt been deceived with them. Where the irritation in the urethra has been conſiderable, ſympathetic ſwellings have occurred in the glands of the groin; and one or both teſticles have ſwelled from the ſame cauſe.

It is generally known, that a diſcharge may at any time be excited from the urethra, by the uſe of ſtimulating bougies. This has in different inſtances been put in practice, where violent pain and other bad ſymptoms have been induced by the ſudden ſtoppage of a Gonorrhœa, but it has alſo been adviſed for the ſame purpoſe, that is, for exciting a diſcharge of matter, merely for the removal of pain, where neither Gonorrhœa nor any venereal ſymptom had ever taken place; and it has never failed when the ſtimulus is of a ſufficient ſtrength of being attended with this effect.

We are informed by authors, that gout has in some instances been productive of a discharge of puriform matter from the urethra; and I have not a doubt of its happening in rheumatism. Of this I have met with different well-marked instances, where a flow of matter from the urethra has alternated with pains in the knees, and other large joints; and among labouring people accustomed to work much in water, such as ditchers, a discharge of this nature is by no means unfrequent. A patient of mine, who annually takes a great deal of exercise in following game, is always seized with a discharge of matter from the urethra when he goes in search of ducks, by which his feet and legs are kept immersed in water for several days together.

Other causes might be mentioned, by which a discharge from the urethra is at times produced, in every respect similar to the matter of Gonorrhœa Virulenta, but these are sufficient to shew that it may frequently occur from causes of the most innocent nature, and in persons entirely blameless. Of this, all who have done much business in this branch of practice will be easily convinced, as instances of it are often occurring; but the distress which the want of discrimination in matters of this kind is apt to excite, is often so great, not to individuals alone, but to the families with which they are connected; and I have happened to meet with so many disagreeable occurrences of this kind, which might easily have been prevented, that I judged it proper in this manner to take particular notice of it.

The fact being established that all the usual symptoms of Gonorrhœa Virulenta may be excited by a variety of causes, may be considered as an additional proof of the matter of Lues Venerea, and of that disease being different; for although the matter produced in this manner in the urethra is so similar to that of Gonorrhœa communicated by impure coition, that the one cannot be distinguished from the other, yet no person ever imagined that the symptoms of Lues Venerea could be produced by any of these, nor by any cause whatever, but the absorption of the matter of that disease itself.

It may alſo be remarked, that this opinion of the difference between theſe two diſeaſes is farther confirmed by the method of cure being the ſame, whatever may have been the cauſe of the running. Whether the matter diſcharged from the urethra be excited by infection communicated by a perſon labouring under Gonorrhœa Virulenta, or by any of the cauſes I have enumerated of Gonorrhœa Simplex, the method of treatment ought not to be varied. It is true that the latter will, for the moſt part diſappear, whether any remedy be employed for it or not; but this will alſo happen with Gonorrhœa Virulenta. A cure, however, will be obtained much more ſpeedily by a timeous and proper uſe of injections than in any other manner; and if this is admitted in one variety of the diſeaſe, it will be found equally applicable in the other. So far, indeed, as my obſervation goes, the diſcharge in Gonorrhœa Simplex is not more readily affected by the internal exhibition of medicines than we have ſhewn to be the caſe in Gonorrhœa Virulenta, while a proper application of an aſtringent injection very ſeldom fails in removing it. When, however, it ſeems either to depend upon general debility, or to be much connected with this ſtate of the ſyſtem, we find from experience that cold bathing, and whatever tends to reſtore the loſs of tone that has taken place, proves more obviouſly uſeful here than in Gonorrhœa Virulenta.

END OF THE FIRST VOLUME.

A

TREATISE

ON

GONORRHŒA VIRULENTA,

AND

LUES VENEREA.

BY BENJAMIN BELL,

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CHAPTER IV.

On Lues Venerea.

SECT. I.

General Obſervations on Lues Venerea.

THE Lues Venerea, Syphilis, or Venereal Diſeaſe, was firſt deſcribed with accuracy by the authors who flouriſhed about the end of the fifteenth century. This induced many to imagine that it was not previouſly known in Europe; and Columbus with his followers having about this period returned from their firſt expedition to the Weſt Indies, it has been ſuppoſed that they brought this diſeaſe along with them.

That the venereal diſeaſe might be met with by Columbus when he firſt landed in Hiſpaniola, I will not diſpute. Like many other diſeaſes, it might not be peculiar to one ſet of people, or confined to one hemiſphere of the globe; but many arguments might be induced to ſhew that it was well known in the old continent, and that it prevailed among the Jews, Greeks, and Romans, and their deſcendants long before the diſcovery of America. This would lead, however, to a great length of diſcuſſion, and being

more a matter of curiosity than of real utility, I shall not enter farther upon it at present.

Various definitions have been given by Nosologists of Lues Venerea, but the symptoms of the disease are so numerous, and the appearances which it assumes are so complicated, that no definition sufficiently comprehensive and accurate, can be given of it. In some instances it appears in a particular spot only, and continues apparently local for a great length of time; while in a great proportion of cases it soon contaminates the whole system, producing a greater variety of symptoms than perhaps any other disease with which we are acquainted.

Different opinions have prevailed, respecting the manner in which Lues Venerea may be communicated, but it is now certain, that it can be produced in no other way than by direct application of the matter of contagion to the surface of the body; or by passing, as other hereditary diseases do, from parents to their children. The virus cannot be carried, as was once imagined, from one person to another by the atmosphere, but it may be applied in various ways so as to communicate the disease.

1. In a great proportion of cases the disease is given by one person to another in coition. The venereal matter resting upon one or more points, excites small inflammatory pimples termed chancres, from which it is carried by the absorbents into the system, for the most part producing, in its way, obstruction, and swelling in the contiguous lymphatic glands; and thus forming buboes in the groins.

2. It is frequently given by a diseased child to a nurse, in which case the nipples first become sore, and the matter as it passes into the circulation, excites swellings in the glands of the axilla.

3. An infected nurse can scarcely give suck without communicating the disease to the child. When this happens from venereal sores in the nipples, sores of a similar nature form on the lips of the child, and the matter from thence is taken up by the absorbents. But a child may also be infected merely by sucking

the milk of a diſeaſed woman. In this eaſe, the diſeaſe does not always appear at firſt about the mouth of the child: It proceeds more readily to contaminate the ſyſtem than to produce any local effects. Many indeed allege that the diſeaſe cannot be communicated in this manner, and are of opinion, that a child cannot be infected merely by the milk of a nurſe; I am convinced, however, from a variety of facts, that the opinion I have adopted is well founded; but we ſhall have occaſion to conſider it more particularly hereafter.

4. The fœtus may alſo be infected as it paſſes from the uterus by the matter of venereal ſores in the pudendum of the mother. Of this I have known different inſtances. In ſuch caſes, one or more ſores firſt appear in particular parts, from whence the matter is carried by the abſorbents into the ſyſtem.

5. I have known different inſtances of the diſeaſe being given to midwives in delivering women with venereal ſores about the pudendum.

6. In whatever manner the matter of Lues Venerea is applied to a wound, or to an inflamed or ulcerated ſurface, the diſeaſe will, in a great proportion of caſes, be produced. Surgeons, in dreſſing venereal ſores, are ſometimes infected in this way; and the diſeaſe has been communicated by performing the operation of blood-letting with a lancet that had previouſly opened a bubo.

7. Although we find in moſt inſtances of this diſeaſe, either that the matter has been directly applied to a wound or to an ulcer, or that by its own acrimony it had induced both inflammation and ſuppuration before abſorption took place, yet caſes ſometimes occur in which nothing of this kind can be diſcovered, and where the matter is abſorbed while both the cutis and cuticle remain entire. This will moſt readily happen where the cuticle is thin, as is the caſe in the glans penis and lips. Hence the ſyſtem has, in different inſtances, been infected by matter left upon the lips in kiſſing, and in drinking out of a cup recently uſed by an infected perſon, and in

ſome of theſe without any ulceration being induced.

This mode of receiving venereal infection is not a frequent one, but as I have met with it in various inſtances, while the poſſibility of its exiſtence is denied by many, I thought it right to mention it, in order to prevent theſe miſtakes, and that miſchief in practice which might ariſe from the prevalence of ſuch an opinion.

So readily does the venereal poiſon enter the ſyſtem, that it can ſcarcely be applied to any part of the ſurface of the body but with conſiderable hazard. For the reaſons that I have mentioned, abſorption will occur with more certainty in ſome parts than in others; but I know, from various facts, that ſcarcely any part of the ſkin is too thick to prevent it, particularly if the parts have been rendered tender or irritable, either by inflammation or any other cauſe. Nay, it ſometimes happens where no affection of this kind is perceived. In two inſtances buboes occurred in the axilla, and the patients were poxed by the matter of venereal ſores being applied to the fingers where the ſkin was ſound; and in another, the diſeaſe was communicated by the patient wearing the ſame breeches which he had uſed three months before, when labouring under extenſive venereal ſores of the penis and ſcrotum, but of which he had been entirely cured. He knew that ſome of the matter had occaſionally dropped upon the breeches, but this did not occur to him till the diſeaſe appeared about the time I have mentioned, in the form of a large ulcer on the upper part of the penis, and without even the poſſibility of his having received the infection in any other manner.

It is ſomewhat remarkable that the venereal virus ſhould ſo readily enter the ſyſtem when applied to any part of the ſurface of the body, when we find, from a variety of facts, that the abſorbents of the ſtomach and inteſtines do not receive it. The matter of venereal ſores, when mixed with water uſed for waſhing them, has, in various inſtances, been

ſwallowed by miſtake ; but we have no inſtance of pox being produced by it.

In whatever way the matter of Syphilis is applied to the abſorbents, when it has once entered the ſyſtem, the effects which reſult from it are nearly the ſame ; but at preſent, I mean, in a great meaſure, to confine the deſcription of the diſeaſe to its riſe and progreſs in the moſt ordinary form of it, where the infection is communicated by one perſon to another in the act of coition.

The plan which I mean to purſue is, in the firſt place, to give an account of the different ſymptoms of Lues Venerea in the order in which they commonly appear ; and as our being able to aſcertain the appearance of every ſymptom with as much certainty as poſſible is an object of the firſt importance, I ſhall deſcribe each ſymptom under a diſtinct head, and at the ſame time ſhall point out ſuch circumſtances as moſt clearly ſerve to diſtinguiſh it from other affections to which it bears a reſemblance.

2. I ſhall offer a few obſervations on the nature of the venereal poiſon.

3. An account of the different remedies uſed in Lues Venerea, particularly of mercury, and its preparations.

4. I ſhall treat of the employment of theſe remedies in the different ſymptoms of the diſeaſe.

5. Of Lues Venerea, as it appears in new-born infants.

6. Of ſome peculiarities of form under which this diſeaſe has appeared in Scotland and in Canada.

7. I mean next to treat of prophylactics, or the means of preventing infection.

8. To conſider how far Lues Venerea is ever productive of other diſeaſes ; and,

9. To give in an appendix formulæ of the medicines enumerated in the preceding parts of the work.

SECT. II.

Of the Symptoms of Lues Venerea.

§ 1. *General Obſervations.*

THE venereal diſeaſe appears occaſionally, as I have already obſerved, in a great variety of forms. For the moſt part it occurs locally at firſt upon ſome part of the ſurface of the body, uſually upon the genitals, from whence it proceeds, and commonly with ſome regularity, to affect every part of the ſyſtem. In others, the firſt ſymptoms which take place indicates an affection of the conſtitution, and the diſeaſe, inſtead of appearing upon the ſurface of the body, affects either the throat, bones, or tendons.

When Lues Venerea is not interrupted in its progreſs by the uſe of mercury or other remedies, the following is the order in which the ſymptoms commonly appear, viz. chancres; buboes; ulcers and inflammation in the throat; ulcers in the mouth and noſe; eruptions, or blotches, on the ſurface of the body; ulcers in different parts; nodes, and ſwellings in the perioſteum, bones, and tendons; excreſcences about the anus; ſwellings of the teſtes; loſs of hair from all parts of the body; blindneſs, loſs of hearing, and other anomalous ſymptoms. In this order I ſhall proceed to treat of them.

§ 2. *Of Chancres.*

The firſt effect which uſually reſults from the application of the matter of Lues Venerea to any part of the ſurface of the body, is a ſlight degree of inflammation. The part becomes itchy, red, and in ſome degree painful; and nature endeavouring to waſh away the irritating cauſe, a quantity of ſerum is thrown out under the cuticle, in the form of a ſmall boil or

pimple. This ſoon burſts, and leaves a ſore of a correſponding ſize, foul and ſloughy at the bottom, with hard retorted edges, and which, from the corroding appearance which it aſſumes, has by the French been denominated Chancre, a term which we have alſo adopted.

Chancres do not appear at any certain period after the application of the virus. I have known them form in leſs than twenty-four hours, while in others ſix weeks have elapſed. Three or four days is the moſt frequent period. The patient at firſt feels a ſenſe of titulation over all the glans, and this is often productive of a frequent deſire to void urine. On examining the parts ſome degree of tenderneſs is often perceived over the whole, but the chancre itſelf is ſeldom at firſt larger than a millet ſeed.

The cauſe of chancres appearing at ſuch different periods after the matter of infection has been communicated, is not always obvious; but we may ſuppoſe it to depend in ſome degree upon the acrimony of the matter, and this again upon the matter being more or leſs diluted with ſerum, mucus, or pus. It may alſo in ſome meaſure depend upon the ſtate of the parts to which the matter is applied. As theſe are more or leſs irritable, inflammation will more or leſs readily take place from the application of the virus; and where the parts to which it is applied cannot be irritated, and where inflammation is not therefore produced, no chancres will enſue.

Chancres appear occaſionally over all the external parts of generation, and in ſome inſtances, even on the contiguous parts. I have known them form over the whole ſcrotum, on all parts of the penis, and even on the lower region of the abdomen, immediately above the pubes. They may indeed form on all the ſoft parts of the body, but they are moſt frequently ſeated on the glans penis, and on the preputium near to its connection with the glans; the former being covered with cuticle only, and the latter being a thin production of the cutis vera, both are eaſily made to inflame.

We alſo remark that chancres are frequent about the frenum, from the doublings of the ſkin being here particularly apt to retain the matter by which they are produced. In ſome inſtances they form on the very point of the glans, and even altogether within the verge of the urethra. Here, as well as when near to the frenum, they prove always more troubleſome, and more difficult of cure, than in other parts of the penis.

There is ſometimes only one chancre, but for the moſt part we meet with two, three, or even more; nay, in ſome inſtances, they cover the prepuce almoſt entirely. In this caſe, when they run into one another, none of them are diſtinct, and the whole, when thus connected, give the appearance of a foul ulcer, with hard edges, an unequal ſurface, and diſcharging a fœtid, ill-conditioned matter.

The colour, quantity, and conſiſtence of the matter of chancres is exceedingly variable. It is uſually of a dirty green colour, and often tinged with red, the conſiſtence thin, and the quantity large in proportion to the ſize of the ſores. This laſt circumſtance may be owing to the contiguous parts being apt to inflame, and although not ulcerated, to afford matter which we cannot eaſily diſcriminate from the diſcharge of the chancres.

In a great proportion of caſes the appearances of chancres are ſo nearly the ſame that no perſon of experience can be under any doubt concerning them; but, as they ſometimes vary in ſize, form, and other circumſtances, ſome diſcernment is occaſionally required to diſtinguiſh between them and ſores of a different kind. The diagnoſis of chancres is indeed a point of much importance in practice. We are apt to conclude that every ſore upon the genitals is of a venereal nature, a circumſtance which has ſubjected many to much inconvenience and diſtreſs. Mercury is commonly preſcribed, but where the caſe is not venereal no advantage is derived from it, and the patient, after a tedious and painful confinement, finds the ſores in no better ſtate than at firſt. In all ſuch affections we

ſhould recollect that the penis and contiguous parts are liable to excoriations, pimples, and other eruptive complaints, equally with the reſt of the body; nor ſhould we too raſhly ſuppoſe, as is frequently done, that all ſuch appearances proceed from a venereal cauſe. It is not often indeed that we can be in doubt upon this point, for chancres, in moſt inſtances, are ſo diſtinctly marked that there is no room to heſitate concerning them; but where they do appear in a doubtful form, and eſpecially if the patient has been liable to affections ſimilar in apearance, and where no venereal taint could be ſuſpected, ſome time ſhould always be allowed to paſs before any deciſive opinion is given. When ſores of this kind are of a ſimple, innocent nature, they uſually heal in the courſe of a ſhort time, merely by being kept clean, while they will gradually become worſe if they are venereal if mercury be not employed, or if they are not treated with eſcharrotic or aſtringent applications. In all ſuch circumſtances no remedy ſhould be made uſe of that can either promote or retard the cure of the ſores, till we are enabled by farther obſervation to aſcertain of what nature they really are.

We are moſt apt to doubt of the nature of theſe ſores, when, inſtead of being ſmall and circumſcribed, they ſpread and occupy more ſpace than chancres uſually do. A real venereal chancre is ſeldom ſo large at firſt as the baſe of a ſplit-pea, and the edges of the ſore are elevated, ſomewhat hard, and painful; but although this is very commonly the caſe, yet, in a few inſtances, it is ſo much otherwiſe, that inſtead of a ſmall circumſcribed ſore, we obſerve a ſlight ſuperficial ulceration, not attended either with pain or hardneſs, and which, by the conſequences alone, we find to be venereal. In all ſuch caſes certainty will be obtained from time and obſervation, and in no other manner. Nor can any harm enſue from a ſhort delay; for while this will commonly determine the queſtion, the ſame courſe of treatment will afterwards prove effectual which would have done ſo at firſt; and in this manner ſores may be often cured in the courſe of a few days, in which, if a courſe of mercury had once been entered upon, confinement for ſeveral weeks would have been judged adviſeable.

Beſides the variety of chancres which I have mentioned, there is another, which it is proper to notice. Inſtead of appearing in the form of ſmall circumſcribed pimples, or ſuperficial ſores, ſuch as I have deſcribed, they become ſuddenly elevated into extenſive veſications. In theſe, a thin, clear lymph is ſometimes contained; but more frequently the lymph is tinged with blood. The livid appearance with which this is accompanied gives at firſt cauſe to ſuſpect that mortification may enſue, and accordingly chancres of this deſcription have uſually been judged to be of a more dangerous nature than others. I have not found, however, that this is the caſe. Their colour ſeems to depend entirely on the quantity of blood mixed with the ſerum which they contain, and on their contents being diſcharged, and the cuticle removed, the parts beneath have the appearance of a clean, excoriated ſurface, without being affected in any other manner.

When chancres are properly treated from their commencement, they commonly aſſume a healing appearance in the courſe of a few days; but in ſome inſtances owing to neglect, in others to ſome peculiarity of conſtitution, and perhaps occaſionally to the matter of infection having been particularly virulent, inſtead of becoming clean, and of a red, healthy complexion, and which they always do before a cure takes place, they become daily more foul, and at the ſame time more extenſive, and if their progreſs be not ſtopped by a judicious external treatment, combined with a proper courſe of mercury, they proceed to form ſores of a very conſiderable magnitude. The danger from theſe, when ſeated in the preputium, is inconſiderable; but in the glans, this variety of chancre is apt to go to ſuch a depth as to prove very alarming. The danger is ſometimes great from the hæmorrhages with which they are accompanied, and we are often aſtoniſhed at the rapid progreſs of the ſores. In ſome inſtances they extend ſo quickly as to deſtroy a great part of the penis in the courſe of a few days.

This rapid progreſs, which chancres in ſome inſtances make, is, for the moſt part, ſuppoſed to depend upon ſome peculiarity in the conſtitution of the patient; for, in general, chancres remain circumſcribed, and nearly

ſtationary, for a great part of their duration. But I have reaſon to think, that in ſome inſtances it proceeds from the nature of the matter by which they are produced: I conclude that it is ſo from chancres of this deſcription being much more frequent at particular times than at others, and from obſerving them at the ſame time in different people receiving the infection from the ſame woman. About two years ago I met with more inſtances of this phagadenic chancre in the ſpace of three or four months than I had ſeen for ſeveral years before, and in four of them the infection was traced to the ſame woman: The chancres in all of them appeared early, and made ſuch rapid progreſs that very troubleſome hæmorrhages occurred from them in the ſpace of three or four days from their firſt appearance; and in a ſmall town to which I was lately called for an alarming hæmorrhagy, produced by an ulcer of this kind, the ſurgeon in attendance informed me that in the ſpace of a few weeks he had met with three inſtances of the ſame nature, in which the infection was alſo traced to the ſame woman.

Chancres of every kind, and in all their ſtages, are liable to inflame when roughly treated, particularly when the parts are much fretted by walking, or riding on horſeback. This ought to be attentively guarded againſt, for inflammation not only promotes the abſorption of the venereal virus, as we ſhall more particularly hereafter have occaſion to mention, but when it affects the preputium, phymoſis is commonly the conſequence, and it proves always an untoward occurrence, as it prevents free acceſs to the ſores beneath, a point of the firſt importance in the treatment of chancre.

In women, chancres have preciſely the ſame appearance as in men. They occur chiefly upon the internal parts of the labia pudendi, on the nymphæ, clitoris, and entrance of the vagina and urethra, but they are ſeldom or never altogether within either of theſe paſſages. They are moſt frequent about the under part of theſe labia, owing to the matter producing them being moſt apt to reſt here, and from the ſame cauſe they often form upon the perineum, near the anus. In this ſituation they prove always highly diſtreſsful, and are more apt to terminate

in deep and extenſive ulceration, than in parts not ſo liable to be injured; for here they are fretted by every motion of the limbs, nor can the patient be ſeated without preſſing upon them.

Whether in men or women, chancres on parts covered with firm ſkin have a very different appearance from ſuch as occur upon parts more thinly protected. Inſtead of ſmall circumſcribed pimples, ſuch as I have deſcribed, the ſkin appears red and tender for a day or two, and without being previouſly elevated into ſmall veſicles, ulcerations break out at once. A fœtid viſcid matter oozes out, which, on being removed, leaves the bottom of the ſores of a deep red colour, and their edges inflamed and ragged, and however entirely this matter may be wiped off, it is ſoon renewed, and in the ſpace of a few hours forms into a thick firm cruſt, which either remains till it be torn off, or till it be completely ſeparated from the contiguous parts by the formation of new matter beneath. This kind of ſore is moſt frequent in parts covered with hair, particularly about the root of the penis in men, and above the pubes, and on the perineum in women.

§ 3. *Of Buboes.*

A venereal bubo is a painful ſwelling of a lymphatic gland, produced by abſorption of the venereal virus. The whole ſurface of the body having abſorbents ſpread upon it no contagious matter can be applied to any part of it but with the riſk of injuring the conſtitution. In various inſtances of Lues Venerea the ſyſtem is infected by the matter being carried directly into the blood, but in others a ſwelling previouſly takes place in one or more of the lymphatic glands lying between the part to which the matter is firſt applied and the heart.

Theſe glands being formed by convolutions of the lymphatic veſſels, are apt to be obſtructed by any irritating matter which enters them. Hence a venereal bubo is a very frequent ſymptom of the diſeaſe; and, as it is alſo one of theſe which gives the greateſt diſtreſs and perplexity both to patients and practiti-

oners, I ſhall give a more minute deſcription of it than might otherwiſe have been neceſſary.

The points of moſt importance in the hiſtory of buboes, and which we ſhall therefore be particularly anxious to aſcertain, are, the ſtate of parts moſt favourable to their production; their moſt frequent ſituation; the appearances which they aſſume at different periods of their duration, and the means of diſtinguiſhing them from other ſwellings which they reſemble.

I have already obſerved, that the venereal virus may be abſorbed where the ſkin is ſound and entire: Hence Lues Venerea may take place where no external mark can be diſcovered upon the part to which the matter of infection was applied. It muſt be admitted that this is by no means a common occurrence; but I have met with it in ſuch a number of well marked inſtances, that I have no more doubt of the fact than of any other that falls daily and clearly within our obſervation. It has happened too in almoſt all of theſe, that a bubo was one of the firſt ſymptoms of the diſeaſe. I have now upwards of twenty caſes recorded of bubo taking place where not a veſtige could be traced either of previous Gonorrhœa, chancre, or excoriation.

As the firſt two or three caſes of this which occurred to me gave riſe to a good deal of difficulty, by the uncertain and undeciſive practice with which they were attended, I think it right in this manner to make it known. At the time it was an eſtabliſhed opinion, as it ſtill is with many, that boboes cannot take place without ſome previous formation of matter in the contiguous parts. In the caſes to which I allude the cure was therefore protracted to a great length; for till the nature of the diſeaſe became more obvious, and which ſometimes did not happen till other ſymptoms appeared, the uſe of mercury, from which alone relief could be obtained, was commonly poſtponed. The ſwelling was either ſuppoſed to proceed from a ſtrain in walking or riding, or to originate from ſcrophula, by which a good deal of time was loſt to no kind of purpoſe.

In a former part of this work we have ſeen that ſwellings take place in the glands of the groin from inflammation produced by gonorrhœa: Theſe have, with ſufficient propriety, been termed ſympathetic buboes, and they are by no means uncommon; but the real idiopathic bubo, proceeding from abſorption of ſyphilitic matter, is, in a great proportion of caſes, preceded by ſome obvious local mark of the virus in the contiguous parts, moſt frequently by chancre. The matter paſſes ſo evidently from the chancre along the lymphatics to the contiguous glands, that one or more of theſe veſſels are often found hard, and in a ſtate of enlargement, in their courſe from the ſores to the glands. This, in ſome inſtances, may happen from inflammation excited by the virus; in others, it may be altogether the effect of obſtruction to the paſſage of the lymph. In ſome caſes the lymphatics in this ſtate of enlargement become totally unfit for the purpoſes of abſorption; abſceſſes form in them; and on theſe burſting, they are ſucceeded by troubleſome ſores.

Chancres, in all their ſtages, and in every period of their duration, will occaſionally produce buboes; but it is worthy of remark, that they ſeldom occur but with previous marks of inflammation: Hence buboes are moſt frequent in the incipient ſtate of chancres, while the inflammation by which they were produced ſtill prevails. Indeed more buboes take place during the firſt eight or ten days from the appearance of chancre than in any other period of equal extent in the whole courſe of the diſeaſe. When the original inflammatory ſtate of chancres is over, and the parts are merely ulcerated without being painful, they will continue in this ſituation for a great length of time, without any tendency to buboes being perceived, till inflammation is by ſome cauſe or other induced upon them: Hence we find buboes very frequently occur ſoon after cauſtic has been applied to chancres, and not uncommonly after the parts have been dreſſed with precipitate or any irritating ointment. The pain which theſe occaſion tends, in the firſt place, to create ſome degree of inflammation, to which buboes very frequently ſucceed.

It is not however the higher degrees of inflammation which prove moſt favourable to the production of buboes. When inflammation ſuddenly takes place to a great height, and ſpreads along the lymphatics leading from chancres the ſyſtem is not apt to be infected. Theſe veſſels appear to be deprived by a great degree of inflammation, of the power of abſorption, probably by their being rendered impervious; but it is equally certain, as I have already obſerved, that every ſlight degree of inflammation, as well as whatever tends to ſtimulate the extremities of abſorbents, excites them more or leſs to action, and thereby tends to increaſe their power of abſorption. Of this we have daily proofs in the practice of inoculating for the ſmall-pox, where we find that infection very rarely takes place, perhaps not once in a thouſand inſtances, if the wound at which the matter of infection was introduced is not excited to inflame: Hence the more irritation that is excited at the time of inoculation the more certainly the diſeaſe is communicated.

We may here mention another inſtance of the effect produced by the irritation of lymphatics in promoting abſorption. In the application of unctuous ſubſtances to the ſurface of the body, particularly in the uſe of mercurial ointment, the power of friction is univerſally admitted; and we cannot ſuppoſe that it acts in any other manner than by ſtimulating the abſorbents of the parts. Some indeed have aſſerted, that in matters of this kind no advantage is derived from friction, and that the abſorbents would act with equal influence although the ointment was merely applied to them; but this is ſo directly contrary to the obſervation of all who have attended to the effects of friction in ſuch caſes, that no farther notice need be taken of it.*

It has been remarked that old venereal ulcers do not produce buboes, and this has given riſe to an opinion that the matter produced by theſe ſores is not of a venereal nature, that is, that it would not contaminate the ſyſtem were it carried into the blood by the abſorbents. Mr.

* It ſeems to be ſurpriſing that Mr. Hunter ſhould hazard an opinion to this effect. Vide Treatiſe on the Venereal Diſeaſe by John Hunter.

Hunter was, I believe, the firſt who advanced this opinion, and I do not know that it has yet been publicly controverted; but ſo far as my obſervation goes I can decidedly ſay that it is not well founded. I admit that buboes, or ſwellings of the lymphatic glands, do not often proceed from venereal ſores of long duration, particularly from ſuch as ariſe from infection of the ſyſtem; but although they are not frequent, yet in various inſtances we meet with them. I have ſeen them in the neck, from ulcers in the throat; in the groin, from ſores on the toes and feet; and in the axilla, from ulcers on the fingers and hands: and the cauſe of their not being more frequent may be eaſily explained. We have juſt had occaſion to remark, that abſorption of the matter of Lues Venerea does not often happen if the parts to which it is applied do not inflame. Now we know that it is one of the moſt characteriſtic circumſtances of old venereal ſores, their being ſeldom accompanied with inflammation. This is particularly the caſe in ulcers of the throat, where inflammation ſeldom takes place to any diſtreſsful height. Swellings of the glands in the neck very ſeldom happen therefore from this cauſe, but ſtill they are occaſionally met with; and I believe that they happen as frequently here, in proportion to the frequency of the true venereal inflammation which takes place in theſe ſores, as in any other part of the body. They occur more frequently in the groin and armpit, from ulcers on the extremities, than they do in the neck from ulcers in the throat; but this happens obviouſly from ulcers of theſe parts being more apt to inflame than venereal ulcers in the throat; and it ſerves as a farther proof of the effect of inflammation in increaſing the abſorbent powers of the lymphatics.

In a former work I have ſhewn the propriety of diſtinguiſhing venereal ulcers into two kinds. Chancres I would denominate primary ulcers, being the root or ſource of all farther infection, while all thoſe may be denominated ſymptomatic which ariſe from the ſyphilic virus having entered the ſyſtem. That chancres ſhould be more of an inflammatory nature

than ſymptomatic ulcers, and therefore that the matter produced by them ſhould be more apt to ſtimulate the abſorbents is not ſurpriſing; for we can readily ſuppoſe that the matter of theſe old ulcers muſt be rendered mild by being diluted. Even the matter of chancres become leſs virulent when the diſeaſe has been of long duration; and the diſcharge of an ulcerated bubo, although the bubo itſelf was produced by a chancre, is evidently of a milder nature than the diſcharge of chancres; for we ſeldom or never ſee new buboes ariſe in the glands lying contiguous to an old bubo in a ſtate of ulceration: But we cannot ſurely imagine that this proceeds from the matter of theſe ſores not being venereal. I believe it to depend upon the cauſe which I have mentioned. The matter of a ſore in this ſituation muſt be continually diluted by the lymph which is at all times paſſing into the gland. This may render it ſo mild that it will not be capable of ſtimulating the contiguous glands, ſo as to form obſtructions in them. It will rather paſs eaſily along with the lymph into the general maſs of blood; nor will it produce any immediate or obvious effect, even when it has entered the ſyſtem; for when thus diluted by all the blood in the body, ſome quantity muſt be required to accumulate before any irritation will enſue; and till ſome degree of irritation is excited no evident effect will take place. It muſt either exiſt in ſuch a ſtate of acrimony, or in ſuch quantity as to be capable of exciting irritation in ſome part of the ſolids, otherwiſe no mark of diſeaſe will occur from it: Hence may be accounted for all thoſe inſtances of Lues Venerea breaking out at very diſtant periods after infection was communicated, and of the difference which in this reſpect we meet with in different patients; the diſeaſe in ſome breaking out in the courſe of two or three weeks from the time of infection, while in others it does not appear for eight, ten, or twelve months. Nay, there is reaſon to think that in ſome it has not appeared till ſeveral years have elapſed, and of which I could adduce ſuch proofs as ſeem to render it certain.

That the matter of old venereal ſores is capable of communicating infection few I believe will doubt. Many deciſive proofs might indeed be given of it, but I ſhall only mention the following. When the matter of a chancre excites ſwelling in the contiguous glands we have few inſtances of the virus paſſing into the conſtitution. The glands will remain enlarged for a conſiderable time without any mark of the ſyſtem being injured, probably from the matter of infection being ſtopped in its progreſs by the diſeaſed ſtate of the glands; but when buboes become ulcerated, if mercury be not employed, the diſeaſe, for the moſt part, ſoon breaks out in the throat and other parts of the body from the matter of theſe ſecondary or ſymptomatic ſores having entered the circulation. In ſome inſtances, as I have mentioned above, a conſiderable time elapſes before the conſtitution is affected by the matter of theſe ſores, but it ſcarcely ever fails of ſhewing itſelf at laſt, and not unfrequently in the courſe of a ſhort time from the ulceration of the bubo taking place.

When to this we add, that ſores of this deſcription are cured in the ſame manner with every other ſymptom of the venereal diſeaſe; that they daily increaſe in depth and extent till mercury is employed; and that they commonly put on a healing appearance in the courſe of a ſhort time after this medicine has been uſed, no doubt can remain of their being altogether venereal. Every practitioner knows that in the treatment of venereal ulcers ſores ſometimes remain after every attempt that we can make for curing them, and long after the virus of the diſeaſe is removed by mercury. This, as we ſhall hereafter have occaſion to mention, may happen from various cauſes; but it is not this ſtate of theſe ulcers which we have now been conſidering: It is the real venereal ulcer of which we are now ſpeaking, where the nature of it has not been changed, nor the virus of the diſeaſe removed by the uſe of mercury.

Venereal buboes are moſt frequently ſeated in the groin. This neceſſarily happens from the manner

in which Lues Venerea is usually communicated; for it is the lymphatic glands most contiguous to the parts first infected that most commonly swell. There are few instances indeed of the virus passing thro' these and fixing upon others: Hence buboes arising from ulcers of the lips and gums are seated under the tongue, and beneath the lower jaw; from ulcers in the throat, the glands of the neck become affected; from sores on the fingers and hands, the glands swell about the wrist, elbow, and in the axilla; and the glands about the knee, and on the upper part of the thigh, are most apt to swell from sores of the toes and feet.

In each groin, and somewhat higher than the root of the penis, there is a cluster or string of lymphatic glands, chiefly formed by the lymphatic vessels of the penis and contiguous parts. It is the most contiguous of these glands to the penis that are most frequently obstructed by the matter of chancres. It is proper, however, to remark, that buboes sometimes occur from the same cause in a string of glands lying upwards of an inch lower than these, owing to the lymphatic vessels of the penis passing in some instances out of their usual course and stretching down to these glands. From want of attention to this structure of parts, buboes in this set of glands have commonly been supposed to proceed from the system being infected, unless where they could be obviously traced to an ulcer in the foot or leg; but we may here observe once for all, that buboes never occur from a general affection of the system alone. They proceed, I believe, in every instance from matter absorbed from a particular spot, and producing, as we have already perceived, obstructions in the lymphatic glands lying in its course to the heart. So evidently do buboes originate from local affections, that in chancres of the penis it is commonly the glands in the corresponding groin that swell. When a chancre is seated upon the frenum, or on any other part of the middle of the penis, the glands in both groins are equally apt to be affected; but

when the chancre is confined to one ſide of the penis, or to one ſide of the ſcrotum, we meet with few inſtances of the glands in the oppoſite groin being obſtructed.

In a great proportion of caſes only one of the whole ſtring of glands becomes affected; but occaſionally it is otherwiſe. I have known four diſtinct buboes on one ſide, and three on the other at the ſame time, but here there have always been more chancres than one; for the moſt part indeed the penis in ſuch caſes is nearly covered with ſores.

Were the whole lymphatic glands between the heart and the part at which the matter of Lues Venerea enters the ſyſtem, liable to be affected with it this diſeaſe would be productive of ſtill worſe conſequences than commonly enſue from it. Glands ſituated within the cavity of the abdomen would ſwell and ſuppurate, from which the greateſt danger might be expected; but this does not happen. Scarcely an inſtance can be adduced of any internal glands being affected by the matter of ſyphilis; but this does not depend, as ſome have imagined, upon the tendency of this diſeaſe to affect the more external parts of the body only. The moſt obvious cauſe of it is, that the venereal virus is always abſorbed from the ſurface of the body; we have ſeen that it is always the firſt glands it meets with in which obſtruction occurs; and I have ſuggeſted what appears to be the moſt probable reaſon of the glands ſituated beyond ſuch as are affected at firſt not being liable to ſuffer in future, viz. the ſtop which the ſwelling of the firſt of theſe glands gives to the farther abſorption of matter, and the diluted ſtate of the matter in the progreſs of the diſeaſe, by which it becomes incapable of exciting that degree of irritation neceſſary to produce abſorption, or, if abſorbed, that it is rendered ſo mild as not readily to produce obſtruction in any of the glands to which it is carried. If the matter of Lues Venerea was applied to any internal part of the body, ſo as to excite ulceration, we have no cauſe to doubt of the effects reſulting from it being the ſame that enſue from the

external application of it. The contiguous glands would be firſt affected, and from thence it would proceed to the reſt of the ſyſtem; but the diſeaſe never being communicated in this manner none of the glands ſeated internally can ever be affected.

Theſe circumſtances being premiſed, I ſhall now enumerate the appearances and ſymptoms of buboes, with the means of diſtinguiſhing them from ſwellings which reſemble them. It muſt be kept in view that it is the real venereal bubo of which we are now ſpeaking, and not that inflammatory ſwelling with which the glands in the groin are often attacked in Gonorrhœa. A deſcription of that ſwelling is given in Chap. III. Sect. IX.

The moſt frequent ſeat of bubo, as we have ſeen, is in the groin, and a deſcription of it in this ſituation will be ſufficient. The firſt ſymptom of bubo is a ſlight degree of pain. This excites the attention of the patient, when on handling a ſmall hard knot is diſcovered. In ſome caſes this is accompanied both with pain and tenſion, ſtretching along an enlarged lymphatic veſſel, in the form of a ſmall cord, all the way to the penis; but for the moſt part the tumour is diſtinct, and not apparently connected with any other affection. Even where two or more buboes take place at the ſame time, although near each other, they are always diſtinct and unconnected at firſt, inſomuch that the patient himſelf very commonly points them out

If mercury or other diſcutients be not now employed the tumour becomes gradually larger, and from being, as it commonly is when firſt perceived, of the ſize of a kidney bean, by the eighth or tenth day, and often ſooner, it is uſually of the ſize of a pigeon's egg. From the firſt appearance of a bubo there is ſome degree of rotundity in the form of it. In the middle it is ſomewhat raiſed and prominent, and becomes flattened towards the ſides, and this continues during the whole progreſs of the ſwelling. As the ſize of the tumour increaſes it alſo becomes more painful, and the pain, which at firſt was confined to the bubo itſelf, ſpreads over all the contiguous parts. The patient complains upon the ſlighteſt degree of preſſure, and he cannot walk or move but with much uneaſineſs.

Even when of this ſize, buboes will ſometimes be removed by diſcuſſion; but when this does not happen, the ſwelling, which till this period uſually retains a conſiderable degree of firmneſs, becomes in a gradual manner ſofter and more prominent; the ſkin, which for ſome time retained its natural colour, becomes red and tender; ſome degree of fever is apt to take place, and it is often accompanied with ſlight ſhivering fits. A fluctuation of matter is at length diſcovered, at firſt upon the ſurface of the tumour, and afterwards through a conſiderable part of the whole of it, and on this being diſcharged, either by the tumour burſting or by an opening being made into it, the parts are found to have all the appearances of a common abſceſs containing purulent matter.

The time which elapſes in this progreſs of bubo, from the firſt appearance of the ſwelling till maturation is completed, is exceedingly variable, and depends upon a number of circumſtances; upon the age and habit of body of the patient; upon the degree of pain and fever which take place; and on the gland being ſuperficial or deeply ſeated; for we find by experience that deep-ſeated ſwellings do not ſo eaſily or ſo quickly ſuppurate as thoſe which are immediately beneath the ſkin. Where the conſtitution is much relaxed and debilitated, buboes often remain indolent and ſtationary for a great length of time, while during the full vigour of health and youth, they uſually come quickly forward: When accompanied with much pain and ſome degree of fever, from the firſt their progreſs in general is rapid, while they always advanced ſlowly when the pain is inconſiderable. This general obſervation may be made upon the maturation of venereal buboes, that they ſuppurate more quickly than glandular ſwellings of any other kind, and more ſlowly than common abſceſſes in the cellular membrane. Thoſe who have not had much experience in this branch of buſineſs are apt to imagine, from the deſcription which they have peruſed of the appearances of buboes, and perhaps from their having met with a few inſtances of the diſeaſe in its ordinary form, that no difficulty or doubts can occur concerning them; but this is far from being the caſe. Where a glandular ſwelling, ſuch as I have deſcribed, appears in

the groin, either during the continuance of chancres, or ſoon after ſores of this nature have healed, there will be no cauſe to doubt of its being venereal: But buboes do not always appear in a ſimple unmixed ſtate. They are ſometimes combined with other affections, where they neceſſarily aſſume other appearances; and they occur in ſome inſtances, as I have already mentioned, without being preceded by the leaſt veſtige of ulceration. This laſt circumſtance of itſelf is commonly productive of doubt; but the difficulty is always increaſed when the ſwelling which takes place is not altogether venereal.

Swellings with which buboes may be confounded, and from which therefore it is proper with as much accuracy as poſſible to diſtinguiſh them, are of different kinds. In ſome caſes theſe ſwellings occur in a ſimple unmixed ſtate, in others they are blended with the real venereal bubo.

1. The moſt frequent cauſe of this kind of perplexity, is ſcrophula. When the venereal diſeaſe takes place in ſcrophulous conſtitutions, buboes as well as almoſt every other ſymptom, not only become much more obſtinate, but aſſume appearances perfectly different from ſuch as occur in the ordinary form of either of theſe diſeaſes. Nor is it neceſſary that practitioners only ſhould be acquainted with this. It ought to be made known in the moſt unequivocal manner to patients, otherwiſe they are apt to be perplexed and diſappointed, and to blame thoſe who have the charge of them, for what it is not often in the power of art to prevent.

Where evident ſymptoms of ſcrophula have previouſly taken place, or where that diſeaſe obviouſly exiſts at the time, there is no great difficulty of convincing patients of any ſymptom of Lues Venerea with which they are attacked, being likely to partake of it; but they ſhould alſo know, that during the continuance of Lues Venerea, ſymptoms of ſcrophula frequently appear where that diſeaſe was not previouſly ſuſpected to exiſt, and which otherwiſe might never have taken place. Of this I have met with many inſtances, where a ſcrophulous taint, which had till then remained concealed, broke out at once with much violence on the ſyſtem being infected with Lues Venerea.

We judge that a ſwelling of this kind partakes of ſcrophula when, inſtead of yielding to a proper application of mercury, or coming forward to ſuppuration in the time which venereal buboes commonly require, it either remains ſtationary or advances in that ſlow gradual manner peculiar to tumours of a ſcrophulous nature. Tumours altogether venereal do not advance ſo rapidly as common abſceſſes, but they come much more quickly forward than ſcrophulous ſwellings. In moſt inſtances, a venereal bubo that is allowed to ſuppurate arrives at full maturity in the ſpace of four or five weeks; often in leſs time than this, from its firſt commencement; whereas, when conjoined with ſcrophula, two or three months will paſs over before this takes place. The pain, inſtead of being ſmart, as happens in buboes, is more of a dull obtuſe nature. The ſwelling at firſt, inſtead of being firm, as we have deſcribed it to be in buboes, is ſomewhat ſoft and compreſſible, like dough; and even when matter is fully formed in it, the firmneſs and tenſion attending it is leſs. Neither is the redneſs of the teguments, which takes place as the ſwelling comes forward, of ſuch a bright hue as in buboes.

This kind of connection between Lues Venerea and ſcrophula, may, in ſome inſtances too, be diſcovered by the ſize of theſe tumours. The true venereal bubo is no doubt very variable in point of bulk, but it never becomes ſo large as tumours of this mixed nature commonly do. Few of the former ever ſurpaſs the ſize of a pullet's egg, but the latter very commonly become two or three times larger than this. I have at preſent two inſtances of this kind of ſwelling ſtretching from the root of the penis, nearly to the ſpine of the ileum.

2. Venereal buboes are very apt, in the courſe of their progreſs, to be attacked with eryſipelas. When this does not take place till towards the latter ſtage of the ſwelling no cauſe for doubt occurs from it, as the real nature of the primary affection is previouſly rendered obvious. But when it occurs at firſt, as ſometimes happens, the practitioner, as well as the patient is thereby apt to be deceived. Tumours of this kind, inſtead of being circumſcribed, with their limits diſtinctly marked, as happens

in buboes, are commonly diffuſed, and terminate in a more imperceptible manner in the contiguous parts. Inſtead of the vivid complexion of common inflammation, they are of a more deep copper colour, and the inflammation which takes place occurs ſuddenly, inſtead of approaching in a more gradual manner.

I may alſo remark, that the pain in theſe ſwellings accompanied with eryſipelas, gives more diſtreſs from the ſenſation which it communicates of a burning degree of heat than we ever meet with from theſe lancinating pains which take place in the latter ſtages of the true venereal bubo.

3. Lumber abſceſſes have in ſome inſtances been miſtaken for buboes. This, however, may at all times be eaſily avoided, and can never occur but from ignorance or inattention. Any perſon of experience will eaſily diſtinguiſh by examination with his fingers, the difference between the one and the other. In the one the ſwelling is ſeated in the cellular ſubſtance, while it is in the body of a gland in the other. Whoever has once handled theſe different parts in a tumified ſtate will be at no loſs to diſtinguiſh between them; and to thoſe who have not had this opportunity it is perhaps impoſſible to mark the difference by any deſcription that can be given of it. I may remark, however, that theſe two ſwellings are for the moſt part ſufficiently diſtinguiſhed by the ſymptoms which precede and attend them. If buboes be not always preceded by chancres, lumber abſceſſes are univerſally attended with pain about the ſmall of the back and in the loins. This ſymptom indeed very commonly occurs as a fore-runner to the appearance of the tumour in the groin, and almoſt in every inſtance, before the tumour appears, the patient is much debilitated by the fever with which he is attacked from the firſt formation of the diſeaſe, and which never in any conſiderable degree happens in bubo.

4. In ſome caſes, both inguinal and fœmeral herniæ have been miſtaken for buboes. Of this I have known different inſtances with patients; nor is it ſurpriſing that it ſhould be ſo, for both kinds of ſwelling appear nearly in the ſame part; they are neither of them attended with any alteration in the colour of the ſkin, when they firſt

appear, and they are both, for the moſt part, accompanied with ſome pain; but ſtill the difference between them is ſo obviouſly marked that one can ſcarcely ſuppoſe it poſſible for any practitioner, however ignorant he might be, to fall into any difficulty upon this point, did we not know that in different inſtances it had happened. Herniæ have not only been miſtaken for buboes, but buboes have been treated as herniæ.

Beſides the very marked diſtinction which occurs between bubóes and herniæ, in the appearances and other circumſtances immediately connected with the tumours, and with which every practitioner ought to be acquainted, herniæ is for the moſt part ſufficiently diſtinguiſhed from the other by the ſickneſs, obſtruction of the bowels, and other ſymptoms with which it is accompanied, and which ought alſo to be ſo generally known that to enumerate them more particularly would be altogether unneceſſary.

5. Ulcers in the feet and legs, from whatever cauſe they may ariſe, occaſionally produce ſwellings in the glands of the thighs: Theſe, in ſome inſtances, have been miſtaken for buboes. The chief means of diſtinction are theſe; our knowledge of the exiſtence of ſuch a ſore as we have found by experience to be productive of tumours of this kind; the ſeat of the tumours, theſe ſwellings being commonly on the fore part of the thigh, and ſomewhat lower than the ordinary ſeat of buboes; and laſtly, their being attended with little or no pain, and very ſeldom proceeding to ſuppurate, but rather continuing indolent, and nearly of the ſame degree of hardneſs from the firſt. Even when they do contain matter the ſkin ſeldom loſes its colour; a circumſtance which never happens with buboes in a ſtate of ſuppuration.

Women labouring under the venereal diſeaſe are equally liable to bubóes with men; and the diſeaſe is ſo exactly ſimilar in both that a deſcription of it in the one ſex renders it almoſt unneceſſary to ſpeak of it in the other. The only circumſtance in which they are different is the ſituation of the tumours.

From the courſe of the lymphatics not being exactly the ſame in women the ſite of buboes in them muſt neceſſarily be different. I met with one inſtance of

the ſwelling exactly upon the middle of the mons veneris; for the moſt part, however, they are ſituated on the courſe of the round ligaments, near to where they enter the abdomen, or higher in the groin, ſomewhat nearer the pudendum, than in men. Theſe laſt become equally large with buboes in men; but the others, it has been remarked, remain ſmall, and ſtill more circumſcribed than buboes in their ordinary ſituation.

The ſymptoms we have hitherto been deſcribing, viz. chancre and bubo, are at firſt always local; that is, they are never produced by, although they are very commonly productive of, what may be called the conſtitutional ſtate of the venereal diſeaſe. This has induced ſome to treat of theſe ſymptoms as diſtinct and unconnected with the conſtitutional affection; and there would be much propriety in their doing ſo, were it poſſible to determine when the matter of chancre or of bubo has entered the ſyſtem or not. But ſo far as I know this has never been done; and there is much cauſe to imagine that no attempt towards it will ever prove ſucceſsful. Some ingenuity has been ſhewn in endeavouring to aſcertain the time which muſt elapſe between the appearance of chancre and abſorption by the lymphatics; and even during this period, the diſeaſe, it is ſaid, ſhould be conſidered as local. To me, however, all ſuch attempts appear to be both futile and dangerous. The point in queſtion can never, in my opinion, be aſcertained; and while the contrary idea prevails, the conſtitution would in many inſtances be injured, as it would be very apt to lead, as with ſome it has already done, to a very hazardous practice, a dependence in the treatment of theſe ſymptoms upon local remedies. Chancres and buboes may both remain in a local ſtate for a great length of time. Nay, it is poſſible that their cure might ſometimes be accompliſhed without any of the matter ariſing from them entering the conſtitution; but as this is mere conjecture, as we have no method of knowing when this might be the caſe, and as we know from daily obſervation that in almoſt eve-

ry inſtance the conſtitution is injured even by the ſlighteſt degree of theſe ſymptoms, I judge it in every reſpect better to treat of them as conſtitutional affections.

The next ſymptom we have to deſcribe is univerſally allowed to originate from the virus when it has entered the ſyſtem.

§ 4. *Of the Venereal Sore Throat.*

From whatever part of the body the matter of ſyphilis may have entered the lymphatics, we find that it is more apt to attack the throat than any other part. This does not happen, however, at any certain period. I have known it fix upon the throat in the courſe of ten days from the firſt appearance of a chancre, while in ſome inſtances it remains perfectly ſound till ſeveral months after every external mark of the diſeaſe has diſappeared.

In addition to what has already been ſaid upon this point I may obſerve, that the throat, as well as other parts of the body, are moſt apt to be ſoon affected when no buboes take place. When the matter paſſes directly into the ſyſtem, along the abſorbents, the infection ſhews itſelf more early than where it is firſt ſtopped by buboes, and afterwards taken up by the lymphatics on theſe ſwellings becoming ulcerated.

In the venereal ſore throat the patient is uſually diſtreſſed with ſome degree of uneaſineſs in ſwallowing for ſome days before his attention is much excited towards it. He feels a ſenſation of fulneſs and tenderneſs, but not much pain. In ſome caſes this prevails over the whole throat, but for the moſt part on one ſide only. Unleſs there has been ſome recent cauſe for ſuſpicion the diſeaſe is attributed to cold; but the ſymptoms continuing, and an inſpection being made, an ulcer is in moſt inſtances diſcovered on the part of which he complained in ſwallowing.

Theſe ulcers in ſome caſes make their firſt appearance upon the uvula, but they are much more frequent upon one of the amygdalæ. On firſt inſpection they

are commonly ſmall, but always foul, and accompanied with ſome degree of fulneſs or ſwelling, and with an eryſipelatous redneſs of the contiguous parts.

In moſt inſtances the ulcer remains ſtationary for a conſiderable time, not going deeper than the thickneſs of a ſhilling, nor ſpreading to any greater extent than it occupied at firſt; but in others, unleſs the moſt effectual remedies are immediately employed, the ulcer not only becomes deeper, but ſpreads to a great extent, and in ſome caſes with ſuch rapidity, that I have known the uvula and all the contiguous parts affected in the courſe of a few days. In ſome the ulcer, in its courſe, gives only the appearance of foulneſs to the contiguous parts, which become covered with a yellow coloured ſlough, ſomewhat reſembling the buffy coat of inflammatory blood, while in others it ſpreads in the form of a corroding ſore, and deſtroys all the parts as it goes along. It ſometimes deſtroys a great part of the tonſil before leaving it, but it more frequently ſpreads along the arch reaching from the tonſil, on which it is ſeated, to the uvula, and which, together with the contiguous parts of the velum pendulum palati, are commonly deſtroyed before the other tonſil becomes affected.

Even in this advanced ſtate of theſe ulcers the patient ſeldom complains of much pain, if it be not during the action of ſwallowing. A general uneaſineſs is felt over the throat, but the pain is never ſo acute as the extent and appearances of the ſores would give cauſe to expect. Wherever much pain takes place, we find that it proceeds not from the ſores but from that kind of eryſipelatous redneſs with which the contiguous parts are very apt to be affected, and by which ſuch a diſtreſsful burning ſenſation is ſometimes induced over the whole throat as renders the patient at all times very uneaſy.

In ſome caſes of the venereal ſore throat this inflammatory redneſs takes place without any ulceration. If not prevented by mercury, ulcers would no doubt form at laſt; but I have known the parts re-

main ſwelled, and accompanied with that deep copper-coloured complexion which is very characteriſtic of theſe affections, for ſeveral weeks together, and without any degree of ulceration being perceptible. The diſeaſe in this ſtate, although it is commonly fixed on one ſide of the throat at firſt, is very apt to leave it ſuddenly and go to the other; and this we find will happen again and again, till the one ſide becomes ulcerated, by which it is kept fixed to a particular ſpot.

Where the throat is affected in this manner, that is, where it is attacked both with the venereal virus and eryſipelas, a very diſtreſsful ſymptom commonly takes place, a conſtant heat and irritation over the whole fauces, by which the patient is kept under a perpetual deſire of clearing his throat, of an acrid, viſcid mucus, with which it becomes ſo much ſtuffed from time to time as to render a great deal of exertion for this purpoſe neceſſary; and it prevails equally at all times, even during meals, and when the patient ſhould be at reſt.

That it is chiefly by the irritability which takes place here that this acrid mucus is produced I conclude to be the caſe, from finding that nothing tends ſo much to remove it as ſoothing anodyne applications, conjoined with the internal uſe of opiates.

It is commonly too in this inflammatory ſtate of ſore throats that patients in Lues Venerea are ſeized with deafneſs. Deafneſs may happen from other cauſes, as we ſhall afterwards have occaſion to mention, but in this caſe I believe it to proceed from the inflammation ſpreading to the tuba euſtachiana, ſo as to render it impervious. Inflammation may act in producing deafneſs, either by ſtuffing this paſſage with mucus, or by exciting adheſion between the ſides of the duct. In the one caſe the deafneſs may only be temporary, but in the other it muſt neceſſarily, to a certain degree, remain permanent.

In moſt inſtances the venereal ſore throat does not go deeper than the ſoft parts; producing ſores, ſuch as I have deſcribed, of various degrees of magnitude; but where the diſeaſe has either been too long neglected, or where mercury and other remedies employed do not prove ſucceſsful, the bones themſelves come in ſome caſes to ſuffer. I

have known the body of the upper vertebræ of the neck affected in this manner, and it not unfrequently attacks the bones of the palate and back part of the nose.

One of the most distressful circumstances which practitioners meet with in diseases of the throat is, the uncertainty of distinguishing between venereal affections of these parts and others which resemble them, by which a good deal of time is either altogether lost, or employed with much doubt and undecision. From this cause alone ulcers are sometimes allowed to spread, where it might easily have been prevented by a timeous use of mercury; and in other instances patients are put upon the use of this remedy where it ought by no means to be employed.

The complaints most apt to be mistaken for venereal affections of these parts are, those ulcers which occasionally succeed to long continued cases of catarrhal inflammation, and such as sometimes take place as the consequence of too much mercury having been used, or of the patient being exposed to cold while under a course of mercury.

The chief means of distinction between venereal ulcers of the throat and such as succeed to inflammation are these; ulcers from inflammation very commonly supervene upon abscesses; they are usually clean, and of a florid red appearance, and accompanied with a good deal of pain. The venereal ulcer again seldom or never produces abscess, and in the first place it always forms upon the surface. It is never clean till remedies have been employed for rendering it so; and although it is always accompanied with some uneasiness, the pain attending it is never so severe as in the other. I may also remark, that in the common inflammatory sore throat the contiguous parts do not usually assume that erysipelatous colour which very universally takes place in venereal ulcers, nor are they apt to induce that plentiful secretion of acrid mucus, and the symptoms which ensue from it, which we have shewn to be frequent consequences of the other.

We shall hereafter have occasion to speak more particularly of that variety of sore throat arising from the effects of cold when under mercury, as well as from an over-quantity of mercury having been employed. At present I may remark, that this is distinguished from the venereal sore

throat by a very conſiderable fulneſs or ſwelling, not only in both amygdalæ of the throat, but over the whole fauces, together with ſome degree of tumefaction of the parotid gland, as well as of all the ſalivary glands; circumſtances by no means connected with venereal affections of theſe parts. The parts are not ſo apt to ulcerate as in the venereal diſeaſe, and any ſloughy appearance which takes place upon them, inſtead of being of a buffy colour, as happens in the other, is white and milky, ſomewhat reſembling thoſe apthous cruſts ſo frequently met with in the mouths of new-born infants. Theſe ſloughs too are more extenſive than they ever are in venereal ſore throats. In the latter they are always confined to ſuch parts as are inflamed, while, in the other, they commonly extend a conſiderable way over the contiguous parts.

The natural unequalities on the ſurface of the amygdalæ have, in ſome inſtances, when in a ſtate of inflammation, been miſtaken for venereal ulcers; this, however, may always be avoided, and never can happen but from ignorance or inattention.

§ 5. *Of Venereal Ulcers in the Noſe and Mouth.*

Chancres, or primary venereal ulcers, riſe occaſionally, as we have already had occaſion to remark, both in the noſe and mouth; but ſores of this deſcription, wherever they are ſeated, having been already deſcribed in § 2. of this ſection, we are now to treat of thoſe only which originate from the ſyſtem being infected.

Next to the throat the matter of this diſeaſe fixes moſt frequently upon the noſe, which, ſo far as I have had opportunities of obſerving, is more apt to be attacked with it than the mouth. I need ſcarcely obſerve, however, that ſome variety occurs in this. In a few caſes the mouth is attacked before either the noſe or throat. In others the diſeaſe appears firſt in the noſe; but in a great proportion of caſes it follows the progreſs I am now deſcribing; after having for ſome time fixed upon the throat it goes to the noſe, if the diſeaſe is not ſtopped in its courſe by a proper uſe of mercury. We may alſo remark, that although the ulcers in the throat ſhould be

cured by mercury, if a ſufficient quantity of the medicine be not employed for eradicating the virus, the diſeaſe, when it again breaks out, will appear moſt readily upon the noſe, in the ſame manner as if no mercury had been made uſe of. This, however, is not univerſally the caſe; for in many inſtances we find it moſt apt to return to the parts where it was laſt ſeated, and after again fixing upon the throat it proceeds to the noſe, as it would have done at firſt if no interruption had been given to it.

It does not however attack every part of the noſe indiſcriminately. Some have remarked that the matter of this diſeaſe has a particular tendency to fix upon the external parts of the body, that this always happens in the firſt inſtance, and when it proceeds from theſe to ſuch as are more deeply ſeated that it does ſo with ſome regularity, by attacking ſuch parts firſt as are moſt thinly covered. This, however, does not happen with any kind of regularity, and ſeems only to have been noticed for the purpoſe of ſupporting an opinion. Inſtead of going firſt to the ſkin, which it would do were this opinion well founded, the throat, as we have juſt ſeen, is moſt apt to be affected; and when it afterwards attacks the noſe and mouth, it is not even the moſt external parts of theſe that are firſt apt to ſuffer.

In a few inſtances the diſeaſe no doubt appears firſt upon the outward parts of the noſe, but in by much the greateſt number the more internal parts are previouſly affected. The patient at firſt complains of a troubleſome ſtoppage in one of his noſtrils, accompanied with ſome degree of tenderneſs and pain at a particular point. This is often ſo deeply ſeated in the noſtril that it cannot be ſeen, being moſt frequently upon ſome part of one of the oſſa ſpongioſa; but when the under part of the paſſage is affected, together with a fulneſs of the membrane of the noſe, a ſmall foul ulcer is perceived, which is either covered with a white ſlough, or a firm brown cruſt, and on this being removed, although the parts beneath may appear clean and red, they ſoon become equally foul and ſloughy as before.

In the commencement of these affections, the discharge is commonly inconsiderable; but on a longer continuance, the matter forms in greater quantities, when it usually becomes thin and very fœtid. If the ulcer is seated upon any part of the ossa spongiosa, the bone soon becomes diseased, and the matter acquires a black dirty colour; it becomes larger in quantity, and the fœtor still more considerable than at first. In this stage of the disease large portions of these bones are apt to separate and come away; but before coming to this length, other symptoms have commonly made their appearance. A weeping eye, as it is termed, or a constant flow of tears over the cheek, frequently occurs in this stage of the disease, owing to the under end of the lachrymal duct, which terminates behind the os spongiosum inferius, being apt to be stopped by the disease of this bone. The sense of smelling becomes impaired, and in some is entirely destroyed; and the figure of the nose is at last affected, in the first place becoming swelled, red, and painful, upon the parts immediately above those that are ulcerated, and afterwards losing its prominency by the bones of which it is formed coming away. This does not happen while the disease is confined to the spongy bones of the nose, but the septum itself becomes affected, in which case there is always much hazard of the face being disfigured by this bone giving way, when the nose is apt to fall nearly or entirely flat.

This is the usual course of ulcers in the nose; but instead of attacking the internal parts in the first instance, we meet with them occasionally upon the cartilaginous parts of the nose, in which case they commonly begin with some degree of inflammation of the skin. After the skin has remained red and tender for some time, small ulcerations appear upon it, and these at last running together, a sore of more or less extent is formed by the whole. Like all other venereal sores, ulcers in this situation are always foul; the matter they discharge is thin and offensive, and the skin for some way round their edges is of an ery-

ſipelatous red colour. When the cartilaginous ſubſtance of the noſe becomes affected, they often put on a cancerous appearance; nor has mercury the effect of ſtopping their progreſs ſo readily here, as in other parts of the body: This has in ſome inſtances been the cauſe of venereal ulcers in this part being treated as cancers, by which, even after being extirpated, the diſeaſe has again returned, when a cure might eaſily have been accompliſhed by the mercury having been continued for a due length of time at firſt.

Every part of the mouth is occaſionally the ſeat of venereal ulcers; but although they appear from time to time on the inſide of the cheeks and on the gums, they are moſt frequent upon the palate and on the tongue. In other parts of the mouth the ulcers appear without any previous warning, being for the moſt part fully formed as ſoon as the part affected is examined by the patient, and which is commonly done ſoon after it begins to excite any uneaſineſs; but in the palate no ulceration takes place till the parts have been inflamed for ſome time. A deep copper-coloured ſpot is at firſt perceived ſomewhere between the uvula and middle of the palate. This at laſt becomes ulcerated; and it is worthy of remark, that in no part of the body do venereal ſores advance with ſuch rapidity as they do here. In this reſpect they are different even from venereal ſores in the throat. Theſe laſt, as we have already had occaſion to remark, ſeldom proceed to any great depth, nor do they advance with much quickneſs; but here their progreſs is not only rapid but they go at once to the full depth of all the ſoft parts covering the bones, and in moſt inſtances ſoon do much injury to the bones themſelves. I have known the bones of the palate become diſeaſed in the courſe of a few days from the firſt appearance of ulceration; and it is by no means uncommon to find a great part of the velum pendulum palati deſtroyed in the ſpace of a few days from the time that it was firſt perceived to be affected.

Venereal ulcers of theſe parts have at times been miſtaken for, and treated as ulcers of a very different kind, but with due attention this may perhaps in every inſtance be prevented. We are more apt to fall into the error of treating other ſores as venereal.

Both in the mouth and noſe venereal ulcers have been miſtaken for cancerous ſores; and in the noſe they ſometimes bear a reſemblance to herpetic affections. From both of theſe we diſtinguiſh them not only by the hiſtory of each particular caſe, but by the different appearances which theſe affections actually aſſume. Where a patient with herpetic eruptions on other parts of his body is attacked with ſores of a ſimilar nature upon his noſe or lips, there will be reaſon to conclude that they originate from the ſame cauſe; but where this is not the caſe, and particularly when it is found that the patient either labours under Lues Venerea at the time, or that he was lately affected with it, and not properly cured, this of itſelf will give ground to imagine that they are venereal. Herpetic ſores ſeldom go to a greater depth than the ſkin; whereas venereal ulcers, whether on the noſe or lips, are apt to penetrate deep into the parts upon which they are ſeated.

Cancerous ſores are diſtinguiſhed from theſe, as well as from every other variety of ulcer, by the ſchirous hardneſs in the parts affected with which in every part of the body they are accompanied; and they are particularly diſtinguiſhed from venereal ulcers by the ſmart ſhooting pains which they always excite; a ſymptom which does not uſually occur in the others.

The mouth is equally liable with the throat to ſores from an over quantity of mercury, and from patients being expoſed to cold when under the uſe of it. Theſe are more difficult to diſtinguiſh than any others from the real venereal ulcer; for beſides the reſemblance which in ſome circumſtances they bear to them, as they commonly occur while the patient is under cure of ſome ſymptom of ſyphilis, this of itſelf is apt to create ſuſpicion concerning them. Independent of this, the very ſituation of the ſores gives ſome cauſe to ſuppoſe that they may be venereal, ſo that we are readily induced to conſider every ulcer on theſe parts as being of this nature.

Sores arising from this effect of mercury, although somewhat resembling the true venereal ulcer, are readily enough distinguished from it by whoever has paid attention to this branch of business. Venereal ulcers are circumscribed, and in the mouth, whether upon the inside of the lips, cheeks, gums, or tongue, they are always of a corroding and somewhat of a cancerous appearance. There is seldom at first more than one sore, which does not, however, continue long stationary, for in this situation venereal sores extend quickly. Now sores arising from mercury are always diffused, and we commonly find them in different parts of the mouth at the same time. Like the first appearance of the venereal ulcer in these parts, they are always superficial, but they have not that corroding aspect which the other assumes; and although foul and sloughy, their colour is materially different from those that are venereal. The latter are commonly of a dirty brown colour, in some instances with a slight tinge of yellow; whereas the other has always a whitish appearance, as if the patient had newly been drinking milk.

The situation of the sores also affords some means of distinction. Those arising from mercury seem to be induced chiefly by the pressure of the teeth and gums upon those parts that are more particularly acted upon by the medicine; so that we always find them where the swelling is greatest, and the pressure most considerable: Hence they are most frequent on the sides of the tongue, near to the angles of the jaw; and on the insides of the cheeks; and when they take place in one of these situations, we usually find them prevail over the others. Now the true venereal ulcer attacks one part just as readily as another; seldom at first more than one part at once, and we find it just as frequent upon the upper part of the tongue, and on the under part of the mouth between the tongue and the teeth, where pressure has little or no influence, as in any other part.

With due attention to these appearances, and to the history of the case, no practitioner of observation will ever remain long in doubt; but where any uncertainty takes place, the best method of removing it is to desist entirely from the use of mercury. If the sores are venereal they

will ſoon become worſe, if not, they will ſoon diſappear when the ſwelling and tenderneſs induced by the mercury are gone. I think it proper, however, to remark, that ſores of this kind do not always heal as ſoon as might be expected. In ſome inſtances, the ſwelling of the mouth, produced by mercury, continues for a great length of time. I have known it in a very obvious manner more than two months after any mercury had been exhibited. In ſuch caſes, the ſores proceeding from this cauſe do not readily heal; and where due weight is not allowed to this circumſtance, more mercury is in ſuch a ſituation very often given, by which the conſtitution is not only apt to be injured but the very ſores for which the medicine was preſcribed are rendered worſe. In ſome caſes this no doubt proceeds from inattention or want of experience on the part of the practitioner; but it alſo originates from the fear and anxiety of patients, who, doubting of the real nature of the ſores, and dreading their influence upon the conſtitution, are often ſo impatient, that in a concealed manner they perſevere in the uſe of mercury long after they have been deſired to lay it aſide.

I have inſiſted the more upon this point from a very conſiderable number of caſes having fallen within my own knowledge of the moſt diſtreſsful conſequences being produced by meaſures of an oppoſite nature being perſevered in.

Patients in general are ſo eaſily alarmed with whatever gives the leaſt cauſe to ſuſpect that the virus is not entirely removed, that even the moſt trifling circumſtances, when treated with inattention by practitioners, may be followed with very important conſequences. A ſpoiled tooth, with ſharp ragged edges, is very apt to produce a ſore upon that part of the cheek or tongue to which it is contiguous; and as it takes place in a ſlow imperceptible manner, without exciting pain, and produces a foul ſore, ſomewhat reſembling a venereal ulcer, if the real cauſe of it be not diſcovered and removed, very troubleſome conſequences are apt to enſue from it. From this cauſe alone I have known a patient put under a tedious courſe of mercury, which, with very ordinary attention, might have been prevented; for wherever an ulcer forms, either on the inſide of the

cheek, or on the tongue, the ſtate of the contiguous teeth ſhould be examined; and where any ſpiculæ, or inequalities are diſcovered, they ſhould be completely removed, and due time allowed for the ſores afterwards to heal, before any other method of cure is recommended.

§ 6. *Venereal Blotches.*

Next to the parts which we have mentioned, the matter of Lues Venerea is moſt apt to fix upon the ſurface of the body in the form of eruptions, or what are commonly termed blotches. In a few caſes the ſkin is affected before either the throat, noſe, or mouth; but this is by no means frequent.

Every part of the body is liable to theſe blotches, but they appear more frequently on ſome parts than on others. The cauſe of this is difficult to explain, for when the whole ſyſtem is affected we cannot *a priori* ſay why one part ſhould more readily be attacked than another, but there is no doubt of the fact. In accounting for this diſeaſe fixing moſt frequently upon the throat, noſe, and mouth, ſome have ingeniouſly ſuggeſted that there is probably ſome particular attraction between mucus and the matter of this diſeaſe, from theſe parts being plentifully ſupplied with mucous glands; and mercury being particularly apt to affect theſe parts, while we know that mercury in every form very readily combines with mucus, a theory has been built upon this to account for the action of mercury in the cure of the diſeaſe. Admitting the opinion to be well founded, but which does not appear to be the caſe, ſtill it would not account for the matter of this diſeaſe being particularly apt to fix upon the ſkin, perioſteum, and bones, parts which are leſs plentifully ſupplied with mucous glands than any others of the body. Neither does the idea hold good here which we have already had occaſion to notice, and which ſome have endeavoured to ſupport, of the matter of this diſeaſe having a particular attraction for parts that are moſt expoſed to the atmoſphere. In the riſe and progreſs of the venereal eruption the reverſe of this appears to be the caſe.

I have obſerved above, that every part of the body is liable to be attacked with theſe blotches; but we find from daily obſervation, that they appear both more frequently and more early in the diſeaſe, on ſuch parts as are kept well covered than on thoſe that are not covered at all. We no doubt meet with them both on the face and hands; but for one inſtance of this we have eight or ten of their appearing upon the breaſt and arms; and next to theſe, they attack in ſucceſſion, and with ſome regularity, the ſhoulders, thighs, legs, feet, and hands. Of theſe laſt the extremities of the toes are often the parts firſt affected, particularly the parts lying beneath and round the nails.

Eruptions of this kind excite no pain: a ſlight degree of itchy uneaſineſs is the firſt ſenſation which they produce. When examined in this ſtate, they are found to conſiſt of a number of ſmall diſtinct blotches, ſcarcely riſing above the ſurface of the ſurrounding parts, and ſeldom exceeding the ſize of a ſixpence. They are of a pale red colour, and when ſmartly rubbed the cuticle falls off in the form of fine bran, leaving the ſkin beneath ſomewhat more deeply tinged with red. The ſkin, however, does not appear to be otherwiſe injured; and when the blotches are allowed to diſappear of themſelves as they commonly do, the ſkin is, for a conſiderable time, found to be perfectly ſound, and not even altered in colour.

But although eruptions of this kind diſappear from time to time, no advantage is gained by this; they either proceed from one part to another, or they attack the ſame parts with more violence. In returning upon parts where they have been before, the cuticle is more elevated from the ſkin beneath; and on being removed, the ſkin itſelf is found to be either ſomewhat inflamed or in a ſtate of tenderneſs approaching to ulceration. The ſkin not being in a ſtate fit for producing cuticle, a ſcab or cruſt now forms upon theſe tender parts. In the courſe of a few days matter forms beneath, which for ſome time

oozes out at the ſides, till the cruſt ſeparating and falling off, the foundation is thus formed of the true venereal ulcer, of which a deſcription will afterwards be given.

In ſome caſes theſe red, or rather mottled blotches, inſtead of proceeding to a ſtate of ulcer in the manner I have juſt deſcribed, are all covered over with an infinite number of very ſmall pimples, each of which contains matter; and from theſe running together, a cruſt is formed, which likewiſe falls off at laſt, and leaves the parts in a ſtate of ulceration.

When blotches take place among the hair, which they frequently do, as they do not in their firſt ſtage riſe much above the level of the ſurrounding parts, and as they never in this ſtate create much uneaſineſs, they are ſeldom perceived till a ſcab or cruſt begins to form, and as the matter on oozing out gets matted into flakes with the hair, we are longer in this ſituation than in other parts of the body, of getting a view of the parts beneath, which, on the cruſt falling off, are always in a ſtate of ulceration, forming what is commonly termed the corona veneris.

In the palms of the hands and ſoles of the feet the firmneſs of the ſkin prevents theſe blotches from appearing ſo obviouſly as in other parts. The cuticle is here either ſeparated in broad flakes, early in the diſeaſe, or if it is ſo firm as to confine the matter for a conſiderable time, it at laſt burſts out, when the parts beneath are found to be ulcerated.

It is chiefly in this eruptive ſtate of the diſeaſe that it attacks the nails of the fingers and toes. The cuticle which ſurrounds them is perceived to be red and tender; the parts below the nails alſo become red, and the nails at laſt become looſe, and fall off.

The complaints moſt ſimilar to venereal blotches, and with which they have frequently been confounded, are all the variety of herpetic eruptions, particularly ſuch as are dry, and do not yield matter. There is one remarkable difference between them in the nature of the matter which they afford. The

matter of the true venereal eruption is ſo tough and viſcid that it does not crack, and commonly remains upon the parts perfectly entire, till it ſeparates and comes away; whereas in herpes, although the matter is in one variety of the diſeaſe of a viſcid glutinous nature, it does not form into flakes, as it very univerſally does in Lues Venerea. It ſometimes forms into cruſts, but theſe break and come away in ſmall pieces.

In herpes the eruption appears moſt frequently in the form of a circle and the parts which it ſurrounds appear to be ſound: Hence by the common people it it is uſually termed ring-worm. Theſe circles or rings are of every variety of ſize, but they are ſeldom leſs than a half-crown piece. Now the venereal blotch is not often larger than a ſixpence, and never exceeds the ſize of a ſhilling; and the whole ſkin of the parts affected appears to be nearly in an equal degree of diſeaſe. The mottled appearance which they aſſume gives cauſe indeed to ſuppoſe that ſome parts of the ſkin remain ſound; but on examination with a magnifying glaſs, the whole is found to be more or leſs diſeaſed. Whereas in the herpes, the parts ſurrounded with the ring are equally ſound with any part of the body.

In judging of this point we derive no ſmall aſſiſtance from attending to the ſituation of the eruption, as well as from the hiſtory of its riſe and progreſs. We have had occaſion to obſerve that the venereal eruption appears moſt frequently at firſt upon the breaſt and arms. Indeed this very commonly happens; whereas in herpes it is moſt frequent upon the under part of the abdomen, and about the hands and wriſts.

When to all theſe circumſtances we add, that in the venereal eruption there is commonly much cauſe for ſuſpicion, from the patient's courſe of life, and perhaps even from the exiſtence at the time of ſome other ſymptoms of the diſeaſe, and that in herpes we often find that the patient has either at ſome former period been liable to eruptions of a ſimilar na-

ture, or that they have prevailed in his family, ſcarcely any cauſe for doubt will remain.

Herpetic eruptions and venereal blotches ſometimes occur in the ſame perſon at the ſame time. In this caſe it may be difficult, or perhaps impoſſible to diſtinguiſh them; but no great inconvenience can ariſe from this, for the exiſtence of the venereal affection being aſcertained, this, as being the moſt important of the two, muſt have the ſpecific remedy employed for removing it, and if the other eruption continues after the venereal blotches are carried off, proper remedies muſt afterwards be employed for it.

I know no other eruption that may not be eaſily diſtinguiſhed from venereal blotches.

§ 7. *Of Venereal Ulcers.*

In § 2. of this ſection I have already given a deſcription of chancres, or ulcers produced by the local application of the venereal virus. It is thoſe ulcers we are now to conſider which take place in more advanced ſtages of the diſeaſe, and which evidently proceed from the virus having entered the ſyſtem. In § 4. and 5. venereal ulcers of the throat, noſe, and mouth, have been deſcribed, but ulcers from the ſame cauſe appear occaſionally in almoſt every part of the body.

But although no part of the body is perhaps entirely exempted from theſe ulcers, I mean no external part of it, yet ſome parts are much more liable to be attacked with them than others; and it is a fact worthy of remark, that there is no part of the ſurface of the body on which they do not occur more frequently than on the genitals. Indeed venereal ulcers of theſe parts, from infection of the conſtitution, is an occurrence which ſeldom falls within our obſervation. Almoſt every ulcer on the genitals may be traced to a local application of the virus.

We have already had occaſion to obſerve that venereal blotches are apt to terminate in ulcers. Hence the venereal ulcer is moſt frequent on theſe parts

that are attacked with theſe eruptions, particularly the breaſt, ſhoulders, and arms. We often meet with them among the hair, and between the fingers and toes. In the latter ſtages of the diſeaſe indeed, I have met with them more frequently upon the ſides of the toes than on any other part.

For the moſt part the venereal ulcer is preceded either by blotches, ſuch as we have juſt deſcribed, or by a number of very ſmall pimples; but I have met with ſome inſtances of a part becoming ulcerated without either of theſe appearances going before it. A ſlight degree of itchyneſs prevails for ſome days, and the part is ſcarcely obſerved to be diſcoloured before an ulcer is perceived.

In whatever manner a venereal ulcer may form, the appearances which it afterwards exhibits are nearly the ſame. A conſiderable deſtruction of parts ſoon takes place; more quickly indeed than uſually happens from any other cauſe except mortification. Inſtead of proceeding gradually from the ſurface downwards, as other ulcers do, a certain portion of the ſoft parts between the affected ſpot of the ſkin and bone beneath ſeem to be contaminated at once; for almoſt as ſoon as the ſkin becomes evidently ulcerated, the correſponding parts beneath not only appear to be diſeaſed, but are ſoon thrown ſo entirely out that ſcarcely any thing but the periofteum is left to cover the bone.

The ſides and bottom of venereal ulcers of every deſcription are at firſt always foul; but while chancres and all recent ulcers are uſually white and ſloughy, ſores proceeding from diſeaſes of the conſtitution are of a dirty brown appearance. The matter which they diſcharge is ſometimes thin, and ſo acrid as to deſtroy the contiguous parts, but for the moſt part it is more tough and adheſive than good pus. It has often a ſingularly green colour, particularly in ulcers on that part of the head covered with hair, and it is always of a very diſagreeable fœtid ſmell.

Theſe ulcers are ſeldom accompanied with much pain; for although the ſkin which ſurrounds them has always a tender appearance, being in almoſt every inſtance of an

erysipelatous red colour, they can bear to be handled more easily than sores of any other kind of equal extent. The parts, in some cases indeed, seem to be deprived of their natural sensibility; and I have in such instances found that one of the first effects of the mercury prescribed for the cure has been to render them more irritable.

Venereal ulcers arising from disease in the constitution differ from all such as are local in our not being able to render them clean or bring them to a healing state by any external application that we can employ. Where any doubt exists of the cause, they are often treated with local remedies; but no advantage is derived from them. Even the most powerful detergents have no influence. The parts still remain foul. The matter continues to increase in acrimony; and if a course of mercury is not prescribed, or if not given in sufficient quantity, the sores not only become more extensive, but more numerous, by parts taking on a disposition to ulcerate which did not previously bear any mark of disease.

The description which I have given of the venereal ulcer comprehends all the ordinary appearances of these sores; but some difference is produced in them by a variety of causes; by the nature of the parts in which they are seated; by the constitution being sound or affected with other diseases; and by the effects of such remedies as may have been employed without being sufficiently powerful to accomplish a cure.

In a great proportion of cases the venereal ulcer is seated in the skin and cellular membrane. In the first instance, indeed, these are the only parts that are affected; but in more advanced periods of the disease, we find the virus fixing upon the tendons, fasciæ of the muscles, periosteum, and bones. The parts least liable to be attacked with it are the glands, particularly those of the lymphatic system, but occasionally even they are affected with it. Now we may easily suppose, that the ordinary appearance of the disease, that which it exhibits when seated in the cellular substance, will be materially different from that which takes place from it in the tendons, fasciæ, glands, or bones. It is difficult, however, and perhaps impossible, to give any adequate description of the different appearances which

occur in these ulcers thus differently situated. It is from experience alone that a knowledge of this can be obtained.

The appearances of venereal ulcers are more or less affected by every disease which the system may at the time labour under. Some indeed have contended that no two diseases can exist in the constitution at the same time. This remark, however, is certainly ill-founded. From daily observation, we find, not only that the *system* may be affected with different diseases at the same time, but that two diseases may at the same time fix upon the same part. Of the first we have instances without end. It happens in the combination of fever with every variety of general cachexy, such as dropsy, jaundice, &c. of small-pox with scrophula, and scrophula with scurvy; all of which are often met with, existing, and making progress in the same person at the same time, and of local complaints combining in the same part, a variety of instances might also be mentioned. I have at present a person who had long been liable to piles, who some time ago was attacked with condylomatous excrescences about the anus from a venereal taint; to these succeeded a common abscess from inflammation, and last of all the parts have become cancerous. As all of these are obviously in existence at this moment upon the same parts, and as instances of other combinations of local diseases are occurring daily, it is with surprise and astonishment that I find much labour and ingenuity employed to prove that this connection of diseases never takes place, and in a work too which does the highest credit to the author.

The opinion which the author of that work endeavours to establish, is indeed so contrary to the observation of all who have paid attention to the subject, that I should not have judged it necessary to take notice of it, were it not with a view of preventing the unexperienced from being misled by it; for were it to be received as a general principle, it would in a variety of circumstances have no small influence on practice, and would often, I am afraid, be productive of distress and disappointment, both to patients and practitioners.*

* The publication to which I allude is Mr. Hunter's Treatise on the Venereal Disease.

If this opinion was well founded, every ulcer of the venereal kind arising from disease of the constitution should yield to mercury alone: Instead of which, do we not daily meet with sores of this kind, in which mercury by itself fails entirely, and in which, from the constitution being at the same time infected with scrophula, or some other disease, bark and other remedies must be employed before any progress towards a cure can be obtained? This combination of Lues Venerea with other diseases, particularly with scrophula and scurvy, is indeed, I apprehend, the most frequent obstacle which we meet with in the cure of almost every symptom of this disease. Buboes, as well as ulcers, are always particularly obstinate where scrophula prevails; and the slightest tendency to scurvy puts it out of our power to employ mercury in such quantities as the cure of venereal ulcers often requires. The effects of this are chiefly perceived at sea, where a patient with Lues Venerea is sure to have all the symptoms aggravated, particularly such ulcers as may prevail, on his being attacked with scurvy. The ulcers not only put on a worse appearance, but till the scorbutic affection is removed, the farther use of mercury is for the most part laid aside.

The description of the venereal ulcer which I have given above relates to the disease in its more early stages, and where no mercury has been employed. When mercury is prescribed, and has entered the system, sores of this description soon put on a healing appearance; and if the medicine be continued, the cure usually goes on without interruption. But if, instead of being long enough persisted in, the mercury is laid aside before the virus is eradicated, an effect results from it which could not *a priori* be expected. This partial effect of mercury not only gives a different appearance to venereal sores, but commonly renders them more obstinate. If the sores have healed, and again break out, although they will not go to such a depth as they did in the first process of ulceration, they will spread farther, and become more numerous. By this imperfect application of mercury, a disposition seems to be formed, not only in the parts contiguous to the old sores, but in almost all the soft parts of the body, to go readily into a state of ulceration; and although the new sores

which take place do not go deeper than the cellular membrane, they daily become more numerous, insomuch that the parts in which they are chiefly seated are apt to acquire a honey-comb appearance.

But although these newly-formed ulcers seldom penetrate to such a depth as those to which they succeeded, they assume every other appearance of the true venereal ulcer. They are foul and somewhat spongy: They are not attended with much pain, and the surrounding skin has an erysipelatous, or copper-colour complexion. In the course of my experience, however, they have always proved to be of more difficult management than the others; nor does mercury act with such certainty in removing them. The same sores either continue obstinately to resist the effect of this remedy, or, if these heal, others break out, and thus spread over a very considerable extent of surface, giving all the appearances of the phagadenic or depascent ulcer of different authors.

Hitherto I have been supposing that the disease is confined to the soft parts of the body; but where the ulcers as now described, have been neglected, or where the remedies employed for removing them have not proved effectual, they are apt to affect both the bones and tendons; and where sores take place upon any of these parts, their appearances are materially different from the common venereal ulcer. The parts affected, instead of being corroded, and hallowed out in the form of a cup, as they usually are in the venereal ulcer, are filled with a soft fungous substance, of an unhealthy complexion, which bleeds freely on being injured, and which always returns soon on being destroyed with escharrotics. The discharge of these ulcers, when seated upon carious bones, is thin and of a brown colour, and still more fœtid than the ordinary discharge of venereal ulcers in the softer parts of the body. When the surface of a tendon becomes ulcerated the parts are not only soft and spongy, but more foul or sloughy than sores of almost any other kind.

There is another variety of venereal ulcer of which it is proper to take notice, I mean that which succeeds to the bursting of a bubo. Seated in the body of a gland, this

kind of ſore has a very different appearance from the common venereal ulcer, which attacks, as we have juſt ſeen, the ſkin and cellular ſubſtance only. Buboes are always accompanied with pain and inflammation: Hence when matter forms in them, it is of the purulent kind. But although the common venereal ſore is always attended with ſome degree of redneſs, as this is not of the true inflammatory kind, being evidently eryſipelatous, and which we find from experience never produces purulent matter, the diſcharge accordingly is different. But although the matter of buboes is always more or leſs purulent at firſt, it uſually becomes thin and acrid at laſt, owing to ſores of this deſcription, on the farther continuance of the diſeaſe, being apt to become eryſipelatous. Beſides this change which takes place in the nature of the matter, the parts in which it was collected, although at firſt they have all the appearances of a common abſceſs, at laſt become foul and ſpongy; the edges of the ſore become callous; and a much greater degree of pain takes place than almoſt ever accompanies the ordinary form of the true venereal ulcer.

But although the ſore which ſucceeds to a bubo is neceſſarily at firſt always in the body of a gland, we find at laſt that it is apt to ſpread and affect the contiguous parts. The matter pervading the cellular ſubſtance ſinuſes form; and the ſkin becoming inflamed, the foundation is thus laid for the formation of other ſores. In this manner the ulcers which ſucceed buboes frequently ſpread to a great extent, one part either breaking out as another heals, or perhaps the whole continuing open, ſo as to leave all the upper part of the thigh, and in ſome caſes, the under part of the abdomen, covered with ſmall ſores.

No part of the treatment of Lues Venerea gives more diſtreſs to patients, or more perplexity to practitioners, than the management of this ulcerated ſtate of buboes, which, beſides being accompanied with much pain, is often one of the moſt obſtinate ſymptoms of the diſeaſe. Inſtead of yielding to the uſe of mercury, ſores of this deſcription become often more obſtinate after mercury has been employed; fever is apt to take place; and where the conſtitution is not very robuſt, they even ſometimes end in the death of the patient.

This great degree of inveteracy in these sores may originate from different causes; but I have commonly found that it takes place in scrophulous constitutions, and in such as are particularly delicate. It may also be remarked, that among our common people sores of this kind are still more particularly obstinate in such as are under the necessity of living in damp situations, as is usually the case with weavers.

§ 8. *Of Nodes, and other Swellings of the Periosteum, Bones, and Tendons.*

A node is a hard circumscribed tumour, proceeding from a bone becoming affected with a venereal virus. The periosteum, tendons, ligaments, and even fasciæ of the muscles, are also liable to be attacked with the matter of this disease.

The venereal virus, however, does not readily attack these harder parts of the body. In a great proportion of cases it remains long in the habit before they become affected, and when tumours appear upon them, it is often at such a distant period from the existence of any other symptom of Lues Venerea, that both the patient and practitioner are apt to be deceived, and to conclude that they proceed from some other cause: Hence pains and swellings occurring in this disease are often treated as rheumatic affections, in consequence of which remedies are prescribed from which no advantage is derived; while mercury, from which alone relief could be obtained, is entirely overlooked. But although the true venereal node never takes place early in the disease, I mean such swellings as are of an osseous nature, and originate from the bones, yet the periosteum and tendons, as well as the fasciæ of muscles, are in some instances very early affected. This I have known to happen almost as soon as there was cause to suspect that the virus had entered the system. In such cases, however, some obvious reason could always be given for this variation in the course of the disease, by which the virus was made to fix up-

on theſe parts in preference to others, which uſually are firſt affected. In all of them the patients were found to have been much expoſed to the effects of cold and dampneſs, which I have had many opportunities of obſerving to have an evident influence in exciting the virus of this diſeaſe to fix early upon theſe parts. Soldiers infected with Lues Venerea, when expoſed to the cold and dampneſs to which they are uſually liable during encampments, are particularly apt to ſuffer with ſwellings of this kind.

Although it is of much importance to diſtinguiſh between ſuch of theſe affections as ariſe from the bone, and thoſe which proceed from the perioſteum, tendons, and muſcular faſciæ, yet this has not commonly been done with ſufficient accuracy. They have all been conſidered as nodes, and blended under one general deſcription, by which a good deal of perplexity has been introduced in the method of cure.

Nodes may appear upon every bone of the body, but they are moſt frequent where the bones are thinly covered with muſcles: Hence they are moſt commonly met with upon the forehead, upon the forepart of the tibia, and on ſome parts of the radius and ulna. We alſo meet with them on the bones of the hands and feet. I never, however, ſaw them on the fingers or toes, but I have obſerved them upon the ſternum and ribs. In two inſtances, where the patients died of other diſeaſes after being cured of Lues Venerea, and in whom ſevere pains had occurred in the middle of the thighs, nodes or exoſtoſes upon the femur were diſcovered. In one there were two ſmall knobs or protuberances, in the other there were upwards of twenty, and all of them upon the anterior part of the bone.

Theſe oſſeous tumours do not produce any alteration in the colour of the ſkin, unleſs they arrive at a much larger ſize than is uſual. Their firſt approach is diſtinguiſhed by a ſlight degree of uneaſineſs in the parts affected. This excites the patient's attention, when on examination a ſmall hard tubercle or protu-

berance is diſcovered. This in a gradual manner becomes larger; and, while it increaſes in ſize, it alſo becomes more painful. By the time that it has acquired the bulk of half an ordinary walnut, and few nodes I believe are ever larger than this, the ſkin has commonly become red and tender: and ulceration at laſt taking place, the bone on being thus denuded, is not only found to be ſwelled but completely carious.

This is perhaps one of the moſt painful ſymptoms of Lues Venerea; for although the pain is at firſt always moderate, it never fails to become ſevere on the tumour advancing in ſize. This does not depend ſo much, however, on any alteration produced in the bone itſelf, as on the diſtenſion of the perioſteum, which the tumour of the bone neceſſarily occaſions; a circumſtance of which we are rendered certain by the pain ceaſing entirely on the protuberance of the bone being laid bare, either by an inciſion, or by the ſoft parts which cover it being deſtroyed by ulceration.

This deſcription of a node, it is proper to remark, comprehends the full progreſs of this kind of tumour to its laſt and ultimate ſtage; a termination we ſeldom meet with, if it be not among the poor and deſtitute. Mercury is commonly preſcribed as ſoon as the nature of the tumour becomes obvious, and as this puts a ſtop to its farther increaſe, it is by great inattention or miſmanagement only that the ſurrounding ſoft parts are ever allowed to ulcerate. When ulceration does take place, the parts ſoon aſſume all the appearances of the true venereal ulcer of which we have already given a deſcription.

The ſame bones upon which nodes moſt frequently take place are liable to tumours of a different kind, which, from their bearing a reſemblance to nodes, have improperly been diſtinguiſhed by the ſame appellation. By ſome, indeed, all tumours upon theſe parts, as well as ſuch as occur in this diſeaſe upon the tendons, ligaments, and faſciæ of the muſcles, are conſidered as nodes. This proceeds from the

confuſed manner in which theſe ſymptoms were deſcribed by the firſt authors who wrote upon this ſubject, by which others who have not paid particular attention to it have uniformly been miſled. It requires, however, no nice diſcrimination to perceive that the tumours to which theſe parts are liable from Lues Venerea are materially different in their formation, and requiring alſo a difference of treatment it becomes an object of no ſmall importance to have this pointed out.

The tumours which moſt reſemble nodes are produced by an effuſion of a ſmall quantity of matter between the perioſteum and bone. This ſeems to proceed from the internal ſurface of the perioſteum becoming ſlightly inflamed, by which a few drops of a colourleſs fluid are poured out upon the ſurface of the bone. If not prevented by an early exhibition of mercury, the tumour, which was at firſt ſo ſmall as to be with difficulty perceived, becomes gradually larger, and from being hard and colourleſs, it becomes ſoft and inflamed. Even when of the greateſt bulk, however, at which it commonly arrives, this tumour does not exceed the ſize of the real node; for the perioſteum not being capable of much diſtenſion, it either ſoon burſts, or the tumour becoming very painful, relief is obtained by making an inciſion into it.

Theſe tumours, although at firſt always hard, are by no means ſo firm as nodes. This, even in their commencement, ſerves as a ſufficient mark of diſtinction between them; and where matter is formed, as the tumour is thinly covered, a fluctuation is ſoon perceived, by which in the progreſs of the complaint, it is clearly and evidently diſtinguiſhed from nodes, which always remain hard to the laſt.

When tumours of this deſcription either burſt or are laid open, although the bone may be found to be rough and carious, no ſwelling is diſcovered; and on the ulcer healing by the means to be hereafter mentioned, the parts appear to be reduced to the level of the ſurrounding ſkin; whereas in real nodes,

the tumour of the bone remains nearly, or perhaps entirely of the ſame ſize during the life of the patient, nor has mercury or any external application, any effect in reducing it. Some indeed entertain a different opinion, but where venereal tumours upon the bones have been removed by mercury, I have much reaſon to think that they have not been real nodes, but merely thoſe ſmall tumours produced by effuſion which we have juſt been conſidering. At leaſt this happened in different caſes in which I have been concerned, where tumours, which at firſt were ſuppoſed to be formed of bone, appeared afterwards to proceed entirely from effuſion; and I have not met with a ſingle inſtance of a tumour evidently oſſeous being ever carried off by mercury, or any other medicine.

Beſides the tumours we have deſcribed, there is ſtill another, by ſome alſo improperly termed a node, with which the parts covering the hard bones are not unfrequently attacked in Lues Venerea. This variety of tumour occurs more early in the diſeaſe than nodes, and proceeds moſt frequently as I have obſerved above, from expoſure to cold and dampneſs. It is alſo diſtinguiſhed from nodes from its taking place in various parts of the body at once.

The patient at firſt complains of pains over the whole affected limbs; but he ſoon finds that one part of each limb is more ſeverely affected than the reſt. In the legs this happens about the middle of the tibia and fibula. In the thighs it occurs at the middle of the femur, and in the arms along the whole courſe of the radius and ulna.

For the moſt part theſe pains are conſidered by the patient as rheumatic; and I have known many inſtances, even of practitioners being deceived with them. No advantage, however, is obtained from thoſe medicines which uſually give relief in rheumatiſm; and at laſt the parts from whence the pains chiefly proceed are found to be ſwelled. But this ſwelling is very different from that fulneſs of parts which occurs in rheumatiſm; and it differs materially from the latter in the parts which it attacks.

The rheumatic ſwelling is chiefly confined to the joints. In very ſevere caſes it no doubt ſtretches over every part of a limb, but it very commonly originates in the joints: Whereas thoſe venereal ſwellings, although they ſometimes ſtretch towards the joints, they very univerſally fix upon thoſe parts of the limb that lie between one joint and another. In rheumatiſm the whole circumference of the limb becomes ſwelled in nearly an equal degree, while in the other the tumour is circumſcribed, being moſt frequently confined to leſs than one half of the circumference of the limb; or when one limb is affected in different parts, as often happens in the fore-arm between the elbow and wriſt, the ſeat of each tumour can be very diſtinctly traced. In the venereal ſwelling of theſe parts the tumour is firm, and ſo deeply ſeated that on a ſlight examination it is often ſuppoſed to proceed from the bone itſelf, while that ſwelling which takes place in rheumatiſm is of a more compreſſible nature, and appears even on the ſlighteſt examination to be altogether free from the bone beneath.

By attention to theſe circumſtances, as well as from the hiſtory of the caſe, we need never be under much difficulty in judging of the nature of theſe ſwellings, nor in determining when they are venereal and when of a rheumatic nature. It is a prevailing opinion, that the difference between them is ſufficiently marked by the pain in all venereal affections of this kind being particularly ſevere when the patient is warm in bed, while the contrary is ſuppoſed to happen in rheumatiſm. I have not found, however, that any dependence can be placed upon this; for both are apt to be very differently affected by the ſame cauſe in different patients, and even in the ſame patients at different times.

This variety of ſwelling ſeems always to originate in the perioſteum, and to proceed from ſome degree of inflammation, which firſt begins in that membrane, and proceeds from it to the ſurrounding parts. Like every inflammatory affection of membranous parts, it does not readily terminate in ſuppuration. I have never known an inſtance of matter forming in it: Nor do thoſe ſerus effuſions take place here which are ſo frequent in rheumatiſm; a circumſtance which conſtitutes another characteriſtic diſtinction

between the two diſeaſes; for rheumatiſm ſeldom arrives at a great height without ſwellings taking place in the parts chiefly affected, and they ſeem all to be of the ſerous kind.

Almoſt every author who has written upon Lues Venerea deſcribes affections of the ligaments, tendons, and faſciæ of muſcles, as frequent ſymptoms: This, however, is far from being conſiſtent with my experience; nor do I ſuppoſe that they often take place but in the moſt advanced ſtages of the diſeaſe.

My own obſervation having led to this concluſion, I was induced to converſe and to correſpond upon the ſubject with others, who from having much employment in this branch of practice I had reaſon to ſuppoſe would be able to give me the beſt account of it. The prepoſſeſſion which they had received from books had prevented them from entertaining a doubt of the frequency of this ſymptom, but none of them had ſeen it ſo often as to be able from his own obſervation to give a diſtinct or well-marked account of it.

Venereal ulcers often penetrate to ligaments, tendons, and other deep ſeated parts. In this manner every practitioner muſt have ſeen tho e parts affected with the virus of this diſeaſe; but in theſe the diſeaſe uniformly begins in the ſkin, and proceeds to the parts beneath. Of ſwellings in the ligaments, tendons, or faſciæ of muſcles from this cauſe, I have met with very few inſtances; and even of theſe ſome were of a doubtful nature, as they occurred in ſcrophulous conſtitutions.

Thoſe ſwellings, ſo far as I have had opportunities of obſerving, are not ſo painful as tumours of the perioſteum and bones. They are ſmall and circumſcribed: At firſt hard and colourleſs, and afterwards on the ſkin becoming red, they turn ſoft, and ſoon burſt. The matter which they diſcharge perhaps never partakes of purulency: It is thin, and either nearly colourleſs or ſomewhat tinged with blood. The ſores which enſue are foul, and uſually more difficult of cure than any other that we meet with in this diſeaſe.

I have ſeen different caſes of tumours of a conſiderable ſize, ſeated upon tendons as well as upon aponeurotic expanſions, and which were ſuſpected to be venereal. Theſe

have commonly been hard, and where they have come to create much uneaſineſs I have had occaſion, in ſome inſtances, to remove them with the ſcalpel. Two of theſe were upon the tendinous part of the biceps; and although in both they had been ſuſpected to be venereal, a very deciſive proof was obtained of the contrary, for they were both extirpated, and the ſores healed eaſily without any mercury being given.

§ 9. *Of Venereal Excreſcences about the Anus.*

The parts of generation in both ſexes are liable to be attacked with warty excreſcences in Gonorrhœa, moſt frequently towards the end of the diſeaſe, when the running is nearly gone. In ſome caſes they ſpread over all the contiguous parts, and even reach to the anus; but however extenſively this may happen, excreſcences of this warty nature which occur from Gonorrhœa are always local, as we judge from mercury having no influence in removing them, and from finding that topical remedies are alone to be depended upon for a cure.*

But beſides theſe, the parts about the anus are occaſionally attacked with excreſcences truly venereal, which appear in the latter ſtages of ſyphilis only, and of which we cannot accompliſh a cure by any remedy that is not conjoined with a complete courſe of mercury. They are eaſily removed, either with the ſcalpel or eſcharrotics; but if mercury is not adminiſtered they ſoon return with more virulence than at firſt.

In ſome caſes they appear at the ſame time with venereal blotches in other parts of the body, which in many inſtances they reſemble, being raiſed or elevated above the contiguous ſurface. Till of late I had not ſeen them but as a ſymptom of fibbens, and I did not ſuppoſe that they took place in the ordinary form of Lues Venerea. I have now, however, met with a ſufficient number of inſtances to convince me that in this I was miſtaken, and which ſhew that they not only occur along with eruptions in other parts of the body, but that altogether independent of theſe

* See Vol. I. Chapter II. Section 22.

they appear as a diſtinct ſymptom in ſtill more advanced periods of the diſeaſe.

They are not ſo hard as thoſe warts which ſucceed to Gonorrhœa; they are more of a fleſhy nature, more tender, and therefore more apt to bleed. They have a more uniform ſurface; and inſtead of being formed of a number of ſmall warts connected together, as theſe tumours about the anus produced by Gonorrhœa uſually are, we find them compoſed of one uniform maſs.

They do not approach ſo near to the verge of the anus as warty excreſcences commonly do, being for the moſt part of the greateſt extent and moſt elevated near to the tuberoſity of the iſchium. In ſome caſes they become ulcerated, and diſcharge a great deal of very offenſive matter; and when this happens in women they appear ſometimes to be productive of buboes; at leaſt in different caſes where buboes occurred in women, no other ſource of infection could be perceived. Why they ſhould not be the cauſe of buboes in men may be difficult to explain; but although I have often met with them in men in a ſtate of obvious ulceration, I never knew buboes to be the conſequence of them. Perhaps in men the lymphatic veſſels of theſe parts do not paſs through any external conglobate glands, and if this is the caſe they cannot produce buboes; for in the hiſtory of buboes we have ſeen that the matter of Lues Venerea does not excite ſwelling or obſtruction in any of the internal glands.

For the moſt part any ulceration which takes place in theſe excreſcences is very ſuperficial, and does not reach beneath the ſurface. In ſome inſtances, however, ſinuſes form in them. In this manner I once knew a fiſtula in ano produced, for which it was neceſſary to perform the uſual operation after the patient was cured of Lues Venerea.

Like other ſymptoms of ſyphilis theſe excreſcences either continue nearly in the ſame ſtate, or become gradually worſe, as long as no remedy is employed for the cure of the diſeaſe in the conſtitution. They never diſappear either entirely or in part by any effort of the ſyſtem; but if by a partial courſe of mercury their progreſs is interrupted, although the virus of the diſeaſe is not completely

extinguiſhed, they ſoon become leſs active than they were before; in courſe of time they diſappear altogether, and with whatever violence the diſeaſe may break out in other parts of the body, it does not again excite a recurrence of excreſcences. In the latter ſtages of Lues Venerea, when by a long continuance of the diſeaſe the whole ſyſtem may be ſuppoſed to be contaminated, we find a variety of ſymptoms exiſting at the ſame time; otherwiſe this, as we have already had occaſion to obſerve, does not readily happen; nor do we commonly find early in the diſeaſe more than one or two of the ſymptoms ſubſiſting at once.

§ 10. *Of Swellings of the Teſtes.*

Inflammation communicated along the urethra in Gonorrhœa is the moſt frequent cauſe of ſwelling of the teſtes. This has induced many to ſuppoſe, and ſome to aſſert, that this ſymptom is never induced by Lues Venerea; that it is always a local affection, and never produced by any diſeaſe of the conſtitution.

That this is very generally the caſe I will readily admit; for in a great proportion of caſes we can clearly trace the diſeaſe to a local cauſe, and it is moſt eaſily removed by local applications; but this is not always the caſe, for I have met with various well-marked inſtances of the teſtes ſwelling from diſeaſe of the ſyſtem alone. Thoſe who doubt the fact will aſk, In what manner can this be aſcertained? By the ſwelling coming on without any external injury; by no Gonorrhœa having preceded; by the patient being known to be infected with Lues Venerea at the time; and by the ſwelling being with eaſe and certainty removed by mercury, while it had daily become worſe as long as thoſe remedies were employed which uſually prove effectual in ſwelling of the teſtes ariſing from Gonorrhœa. With me theſe circumſtances afford complete conviction, and as I have repeatedly met with them I judge the fact to be clearly eſtabliſhed.

The very firſt approach of this ſwelling exhibits a difference between it and that which proceeds from Gonorrhœa. In this laſt a conſiderable degree of pain prevails from the firſt, and the diſeaſe begins in the epidydimis;

but in the ſwelling from Lues Venerea the patient for a conſiderable time feels only a ſlight uneaſineſs, and even on the farther progreſs of the diſeaſe any pain that takes place is not acute, but dull and obtuſe, ſuch as might be ſuppoſed to proceed chiefly from the additional bulk and weight of the teſtes. The body of the teſticle is always firſt affected; and it is only where the diſeaſe is neglected, or where the nature of it is miſtaken, and mercury judged to be improper, that the ſwelling proceeds to the epidydimis.

Theſe circumſtances of themſelves might ſufficiently diſtinguiſh the one variety of ſwelling from the other; but we alſo obſerve that in the ſwelling from Gonorrhœa the ſcrotum becomes red and painful very early in the diſeaſe, by the inflammation ſpreading from the teſticle; whereas in the other the ſcrotum is very ſeldom affected, and in no inſtance till the ſwelling has been of long duration. Hence in the one the patient can ſcarcely admit of the parts being touched, while in the other little or no pain is produced, even when handled with freedom. In the hernia humoralis, as it is termed, the whole contiguous parts ſeem often to ſympathiſe with the diſeaſe in the teſtis, by the pain ſpreading along the groins, and over all the upper part of the thighs and abdomen; while in the other any uneaſineſs which occurs is either confined entirely to the teſticle or to the courſe of the ſpermatic cord. In this the ſwelling comes ſlowly and gradually to a larger ſize, inſomuch that ſome weeks will paſs before it arrives near to its height; while in the other the tumour is often as large in the courſe of forty-eight hours as it ever becomes.

Thoſe who doubt of the exiſtence of the ſwelled teſtes from Lues Venerea aſſert, that where the teſticle becomes hard and enlarged, where no external violence has been applied to it, and without being preceded by Gonorrhœa, that the diſeaſe is always to be conſidered as of the true ſchirrhus kind, forming what in general is called ſarcocele. This, however, is by no means the caſe, and the means of diſtinguiſhing between ſarcocele and the true venereal ſwelling of the teſticle are numerous and obvious. In the former the teſticle has a conſiderable degree of

hardneſs from the firſt. The patient is from the firſt commencement of the diſeaſe, diſtreſſed with ſharp ſtinging pains through the body of the tumour, and by degrees theſe become as ſevere as they uſually are in any caſe of cancer. The ſwelling, although at firſt ſmooth, ſoon becomes knotty and unequal, and at laſt it very conſtantly attacks the ſpermatic cord, which alſo becomes hard, knotty, and painful. Now, in a ſwelled teſtis from Lues Venerea, although a conſiderable degree of firmneſs takes place, it is by no means of that hard nature which always accompanies the ſcirrhus. We meet with no ſtinging pains, not even in the moſt advanced ſtages of the diſeaſe. The ſwelling never becomes hard and knotty, but retains a ſmooth, equal ſurface, and we meet with few inſtances of its proceeding to the ſpermatic cord.

In addition to the deſcription which I have given of the diſeaſe I may remark, that in its more advanced ſtages this ſwelling ſometimes ſuppurates, and diſcharges purulent matter; while in ſarcocele, whenever the tumour burſts, it yields nothing but a thin, bloody ſanies, as commonly happens in all caſes of cancer. The ſores which enſue to the burſting of theſe tumours are fully as different in their appearances as the tumours are different by which they were produced. In the ſarcocele the edges of the ſore are hard and retorted, accompanied with every other circumſtance that uſually takes place in cancer; whereas in the venereal ſwelled teſticle, although the edges of the ſore are hard, they are neither raiſed nor retorted, and the ſore, while it is foul and ſloughy, as venereal ſores always are, exhibits no appearances of cancer.

In very advanced ſtates of this diſeaſe we ſometimes find it accompanied with effuſions into the tunica vaginalis teſtis, producing what may be termed a complicated hydrocele. This, however, is a circumſtance equally common to every tumour of the ſame magnitude and duration to which the teſticle is liable. It even ſometimes ſucceeds to the hernia

humoralis, but not ſo frequently as to ſwellings of greater permanency.

If this affection of the teſtes is neither uncommon nor difficult to diſtinguiſh, it may be ſaid that the particular deſcription which is here given of it is unneceſſary; and I ſhould have judged it to be ſo, if in ſome late publications a contrary opinion had not been ſtrongly inculcated. Even this would not have been a ſufficient reaſon for dwelling long upon any point of little importance, but in the ſubject we are now conſidering many circumſtances are involved. Any theory we can eſtabliſh of the nature of the venereal poiſon, and of the means employed for removing it from the conſtitution, is in ſome meaſure connected with it; while, at the ſame time, it is obviouſly a point of real importance in practice.

§ 11. *Of Alopecia.*

The diſeaſe termed Alopecia by Noſologiſts, or falling off of the air, may be produced by different cauſes; but it is moſt frequently met with as a ſymptom of Lues Venerea in the more advanced ſtages of the diſeaſe.

The hair of the head firſt ſeparates in greater quantities than uſual on being combed. The eye-brows become more thinly covered, and if a ſtop be not put to the diſeaſe of the conſtitution, all the hair of the head, as well as of the other parts of the body, ſoon falls off.

Before the hair begins to ſeparate, a ſcurf is uſually perceived among the roots of it, which comes away in great quantities on the head being combed, commonly in the form of fine bran. On this ſcurf being removed, the ſkin beneath has a red complexion; but the patient does not complain either of pain or tenderneſs, and the ſame kind of brany powder forms repeatedly on the ſame parts, although carefully removed from day to day.

In ſome inſtances the hair is renewed in as great quantity as at firſt; but this is not a frequent occur-

rence: It only happens during youth, and where the virus of the disease is quickly and completely eradicated. In more advanced periods of life it always remains thin, not only upon the head, but on the eye-brows; and when the eye-lashes fall out from this cause they very seldom return.

As mercury has commonly been given before the hair begins to separate, and often in considerable quantities, this symptom has by some been supposed to be more the effect of the medicine than of the disease. This, however, has not been the result of my observation. I have seen different instances of the hair dropping off in Lues Venerea, where no mercury had been employed; and were it to be produced by mercury, it would necessarily occur more frequently, and it would happen with equal readiness in every disease for which mercury should be prescribed.

I consider it to be in almost every instance the effect of that scurf which in Lues Venerea sometimes forms among the roots of the hair. The matter by which the scurf is produced getting access to the roots, soon cuts off their connection with the surrounding parts.

§ 12. *Of Blindness as a Symptom of Lues Venerea.*

In the first chapter of this work some account is given of blindness produced by the retropulsion of the matter of Gonorrhœa. But blindness which takes place in Lues Venerea is materially different both in its rise and progress, and in the remedies by which it is with most certainty removed.

Blindness from Gonorrhœa is always accompanied with much pain. A great degree of irritability, along with a plentiful discharge of matter from the eyes, and more or less inflammation, are the first symptoms of the disease. But in Lues Venerea, loss of vision, to a considerable extent, has commonly taken place long before much pain is experienced; and if inflammation ever occurs, it is not in any remarkable degree.

The matter of Lues Venerea acts in different ways in producing blindness. One of the most frequent seems to

be by injuring the optic nerves, whether by acting immediately upon the nerve itſelf, or by firſt exciting effuſion, or the formation of tumours in the contiguous parts, by which compreſſion of the nerve is at laſt produced.

It is in this manner I conceive that gutta ſerena takes place in the latter ſtages of Lues Venerea. In ſome caſes it comes on in a gradual manner. The ſight becomes leſs perfect from day to day; and both the patient and his friends are ſurprized that this ſhould happen while the external appearance of the eye is not affected. But for the moſt part the diſeaſe takes place almoſt inſtantaneouſly, the patient being entirely deprived of viſion in the courſe of a minute or two from the time that his eyes became uneaſy. Still the external parts of the eyes remain ſound, but the pupils are always greatly dilated, and incapable of any degree of contraction, even when expoſed to the ſtrongeſt light.

In ſome caſes only one eye is affected, but for the moſt part the diſeaſe attacks both at the ſame time.

Cataracts ſometimes form from this cauſe. I have met with different inſtances of this diſeaſe in the latter ſtages of Lues Venerea, where no other cauſe could be aſſigned for it; and I conclude that it was the effect of the venereal poiſon, from the peculiar manner of its approach. The lens is at firſt only partially affected, white ſtreaks appear upon different parts of it, which extend by degrees, ſo as to produce opacity over the whole of it.

But the moſt frequent effect of the venereal virus upon the eye appears upon the vitreous and aqueous humours, and on the lucid part of the cornea. In ſome caſes theſe humours are deprived of their natural tranſparency, they become ſomewhat milky, and at laſt completely opake. At other times this is evidently connected with an opake ſtate of the lucid cornea, which becomes white and thickened, and in ſome inſtances ſo prominent as to disfigure the whole globe of the eye. When this diſeaſed ſtate of the coats of the eye, and of the humours which they contain occur at the ſame time, the whole body of the eye affords the appearance of one confuſed maſs. Neither the chryſtalline lens, nor any particular part of the eye can be diſtinguiſhed.

Before this opacity takes place in the cornea, a number of obſtructed veſſels are perceived on it, accompanied with ſome degree of tenderneſs on being expoſed to light: This gives cauſe to ſuppoſe that inflammation is about to occur; but the diſeaſe in this form makes no farther progreſs. The cornea in ſome ſpots becomes white and opake, probably by the effuſion of part of the contents of theſe turgid veſſels; but all this takes place with little or no pain, and without any of the ordinary concomitants of inflammation. Neither does this whiteneſs of the cornea terminate in ſuppuration, as opacity of this membrane produced by inflammation is apt to do. It becomes even more white than the tunica albuginea itſelf, and evidently more thickened, but I never ſaw matter form in it.

In ſome caſes the venereal virus fixes upon the eye-lids, and chiefly upon their cartilaginous boarders. This ſometimes happens by itſelf, but for the moſt part it is connected with ſyphilitic eruptions in other parts of the body. The parts become red and ſomewhat tender, and an effuſion takes place among the eye-laſhes, either in the form of a dry ſcurf, or of a gummy viſcid matter. In this latter ſtate this effuſion proves always very troubleſome, particularly after ſleep, as it glues the eye-lids ſo firmly together as to render it difficult, and even painful to open them.

In this affection of the eye-lids, I have in different inſtances, obſerved a ſymptom which has not, ſo far as I remember, been remarked by authors. The tears at firſt form in drops near the internal angle of the eye, and this terminates in a conſtant trickling over the cheeks. Thoſe who are not accuſtomed to examine the eyes in this ſtate are apt to conſider this flow of tears as the commencement of fiſtula lachrymalis, whereas it proceeds from a cauſe which muſt effectually prevent the formation of this diſeaſe. On minute inſpection, it appears evidently to ariſe from the puncta lachrymalia being obſtructed by the viſcid matter forming upon the cartilages of the eye-lids, by which the tears which ſhould paſs by theſe openings into the lachrymalſac, and from thence into the noſe, are neceſſarily forced over the cheeks. In ſome caſes this weeping ſtate of the eyes proves to be temporary, and diſ-

appears with the cauſe by which it was produced; but in others it continues permanent, owing, I ſuppoſe, to the puncta being obliterated by the long continuances of the diſeaſe.

This conſtant flow of tears over the eye-lids proves always troubleſome, and in ſome caſes even painful, by exciting tenderneſs, and occaſionally ſome degree of ulceration of the cheeks.

§ 13. *Of Deafneſs from Lues Venerea.*

When treating of the venereal ſore throat in § 4. of this ſection, we had occaſion to remark that a certain degree of deafneſs is, in ſome caſes, a conſequence of that ſymptom, the end of the Euſtachian tube, when it terminates in the throat, being obſtructed. The effect reſulting from this being in ſome inſtances conſiderable, we are led to ſuppoſe that this paſſage to the ear is of no ſmall importance to the ſenſe of hearing: I have known a very diſtreſsful degree of deafneſs produced by it.

Beſides this, the venereal diſeaſe in ſome inſtances excites deafneſs by fixing upon the ear itſelf. The bones ſeem to be moſt liable to be attacked with it. When this takes place the patient is at firſt ſeized with a partial loſs of hearing. This is ſucceeded by a diſcharge of fœtid ill-coloured matter; and in ſome caſes the bones themſelves come away. I need ſcarcely obſerve, that a total and permament loſs of hearing enſues.

Where venereal blotches prevail univerſally over the body, and have been of long duration, they ſometimes fix upon the ear, chiefly upon the lap of the ear. In ſome caſes I have known them to affect the meatus externus ſo as to induce to a temporary deafneſs. In this event the paſſage is either ſtuffed with a dry ſcurfy matter, or the lining membrane of the paſſage becomes thickened, and occaſionally tender and ulcerated. If this proceeds no farther into the ear a recovery may ſtill take place; but as the ſame kind of tenderneſs is apt to attack the tympanum, deafneſs even from this cauſe often proves permanent.

§ 14. *Of anomalous Symptoms.*

Beſides the ſymptoms of which we have given a deſcription, there are others which from their appearing with leſs regularity may be termed anomalous. But theſe, although they occur occaſionally in every ſtage of the diſeaſe, prevail with moſt frequency when the infection has been of long duration.

The moſt troubleſome of theſe ſymptoms are chops, or clefts in the palms of the hands and ſoles of the feet. A red ſomewhat purple-coloured eruption appears upon the ſkin of theſe parts. The cuticle ſeparates and comes away: Still the ſkin remains diſcoloured; and at laſt chops form in different parts of it. They generally remain dry, but in ſome inſtances they diſcharge a thin acrid matter. They are ſeldom painful; but they are always obſtinate and difficult to cure; and the cuticle is in ſome caſes ſo completely removed, that by the tenderneſs which ſucceeds to this the patient is for a conſiderable time deprived of the uſe both of his hands and feet.

In ſome a diſpoſition is formed in the ſkin and cellular ſubſtance of different parts of the body to become thick, rough, and unequal, producing what by Noſologiſts is termed elephantiaſis, or at leaſt an affection which very much reſembles that diſeaſe. In moſt inſtances where this has occurred, different parts of the body have been affected with it at once; but in others I have known it confined to one of the extremities. In the ſlighter degrees of this affection the inconvenience produced by it is inconſiderable, and it is ſeldom accompanied with much pain; but where the limbs ſwell ſo much as they ſometimes do, the diſtreſs which it excites is neceſſarily ſevere. A limb which ſwells from this cauſe becomes firſt very unwieldy; and on the ſwelling increaſing, it at laſt

burſts into ſores, which diſcharge a thin acrid matter, are always foul, and very ſeldom heal.

I have met with different inſtances of this thickening of the teguments in the ſcrotum. The ſkin retains its natural colour; but it becomes firm, and ſo much thickened as to form a tumour which in ſome caſes acquires a very conſiderable bulk. All of them that have fallen within my obſervation came from warmer climates, and two of them were in negroes. They had been miſtaken both for hydrocele and hernia, but I found in all of them that the tumour was produced entirely by a thickened ſtate of the ſcrotum.

From a hernia in the ſcrotum they are diſtinguiſhed by the ſpermatic cord being entirely free of ſwelling; by the abſence of all the ſymptoms of hernia; and by the ſwelling being much more firm than it ever is in hernia. The ſame degree of firmneſs ſerves to diſtinguiſh it from hydrocele, for no impreſſion is made upon it by preſſure; and it is farther diſtinguiſhed from it by its weight, being much heavier than any tumour of equal magnitude containing a fluid.

This ſwelling of the ſcrotum bears a greater reſemblance to ſarcocele, or a ſchirrous teſticle, than to any other affection of theſe parts. It is chiefly diſtinguiſhed from ſarcocele by being totally free of pain, and from being of an equal ſmooth ſurface. The other is not only accompanied with pain, but the ſwelling is knotty and unequal.

As the ſores which occur upon theſe tumours are very apt to aſſume a cancerous appearance, and ulcers of a ſimilar aſpect being ſometimes obſerved to ſucceed to buboes, ſome have been thereby induced to conſider cancer as a ſymptom of this diſeaſe. That the matter of Lues Venerea may occaſionally produce ſores which terminate in cancer will not be diſputed; but we are not from this to conclude, either that the matter of the two diſeaſes is the ſame, or that cancer ſhould be conſidered as a ſymptom of ſyphilis.

Beſides the pains reſembling rheumatiſm, which occur in Lues Venerea, and of which we had occaſion to ſpeak when treating of nodes and affections of the perioſteum, pains of a different kind are apt to take place in the more advanced ſtages of the diſeaſe. They do not remain fixed or permanent, but produce ſharp momentary ſtings, without leaving ſwelling or any other mark behind them. They are moſt frequent in the neck, temples, and jaws. In the latter they are often ſuſpected to proceed from carious teeth, when on examination no affection of this kind can be perceived, or if there are any, no relief is obtained from pulling them. A falling out of the teeth has been frequently deſcribed as a ſymptom of Lues Venerea, but I have never met with it excepting where the patient had taken a great deal of mercury, and where it appeared evidently to proceed more from the medicine than from the diſeaſe.

One of the moſt frequent ſymptoms of the advanced ſtages of ſyphilis is atrophy, or a gradual waſting of the body. This is no doubt a frequent effect of a mercurial courſe, particularly when too much of the medicine has been exhibited; but it is alſo a ſymptom of the diſeaſe. Even where little or no mercury has been given I have known a patient become much emaciated in the courſe of a ſhort time. From a ſtate of obeſity, and with a healthy, florid complexion, a perſon will in ſome inſtances become ſuddenly lean, while his face will be wan or ſallow, as if the veſſels were altogether deprived of red blood. This I conſider as one of the moſt fatal ſymptoms of the diſeaſe, from which, in the courſe of my obſervation few or none have ever recovered.

Irritability and reſtleſſneſs are two ſymptoms of this diſeaſe. When Lues Venerea has been of long duration the ſyſtem becomes ſo irritable that the moſt trifling occurrences prove diſtreſsful. No application can be given to buſineſs; the patient becomes fretful and uneaſy, and his nights are ſpent in watching.

The conſtant anxiety which takes place here is often connected with that ſtate of atrophy which we have juſt deſcribed. It ſeems in ſome caſes indeed to be the cauſe of it. Being always accompanied with an entire loſs of appetite this of itſelf ſoon reduces the body to the moſt emaciated ſtate.

But the moſt univerſal ſymptom of the anomalous kind which prevails in Lues Venerea is fever. Nor is it confined to one ſtage of the diſeaſe. Occaſionally it takes place in all of them. It is neceſſary, however, to remark, that fever which occurs in the commencement of the diſeaſe is very different from that which moſt frequently prevails afterwards. The firſt may more properly be conſidered as ſymptomatic, being always connected with ſome local affection, ſuch as bubo, ſore throat, ulcer, or node, while the other often takes place where no other mark of the diſeaſe can be diſcovered. The one therefore ſubſides along with the particular cauſe by which it was produced, while the other continues obſtinate as long as the virus of the diſeaſe remains in the conſtitution. It is this laſt, therefore, which is of moſt importance, and merits moſt of our attention.

This fever is always of the hectic kind, and accompanied with ſome colliquitive ſymptom, particularly with nocturnal ſweats. Hence the patient ſoon becomes emaciated, but a peculiarity occurs here not met with in other fevers; at the ſame time that the patient becomes languid and reduced he is commonly able to tranſact his ordinary buſineſs, and often continues to do ſo for a conſiderable time after the fever has taken place. He is liable to alternate fits of cold and heat; particularly to much warmth over the whole body in the evening; to reſtleſſneſs and anxiety during the night, and to a conſtant quickneſs of pulſe; but theſe ſymptoms, while they do not come to any great height, do not excite much alarm, and the patient, while no local affection takes place, continues daily in hopes of getting free of them.

For a conſiderable time both the patient and practitioner find it difficult to account for theſe ſymptoms. They are often attributed to cold; in ſome caſes to an incipient pthiſis; and in others to ſcrophula. Remedies for one, or perhaps for all of theſe diſeaſes, are accordingly preſcribed, and no advantage being derived from them, the real cauſe of the fever either is not diſcovered, or at laſt the diſeaſe breaks out in ſome ſuch obvious form as leaves no cauſe for doubt.

Among other reaſons of this uncertainty may be mentioned an opinion which much pains has been taken to inculcate, and which of late has unhappily begun to prevail among thoſe who have not had ſufficient opportunities of being enabled to judge for themſelves. It has been with much confidence aſſerted, that the matter of Lues Venerea cannot exiſt in the ſyſtem, ſo as to induce any ſymptom of diſeaſe, without ſhewing itſelf upon the ſurface of the body, or in ſome ſuch manner as to be at once clear and evident. We ſhall ſoon have occaſion to enter more fully upon the conſideration of this queſtion, but at preſent I may obſerve, that the opinion to which I allude, although ſupported with ſome ingenuity, appears to be altogether void of foundation, being directly contrary to the obſervation of all practitioners of experience; for I hold it as a certainty that this matter of Lues Venerea often exiſts in the conſtitution for a great length of time, and is productive of fever, as well as a variety of other ſymptoms, where no local affection ever enſues. It may happen where no mercury has been employed; but we meet with it moſt frequently where this medicine has been uſed, but not in ſufficient quantities for effecting a total removal of the virus; where it therefore remains in the ſyſtem, and after lurking there for a longer or ſhorter period, according to circumſtances, either breaks out early in an obvious manner, or before doing ſo excites fever or ſome other anomalous ſymptom of a ſtill leſs ſuſpicious nature.

In all ſuch caſes of doubt and uncertainty we muſt be directed entirely by the hiſtory of the riſe and progreſs of the complaint, and by our own obſervation in affections of a ſimilar nature.

SECT. III.

Of the Venereal Virus.

HAVING in the different parts of the preceding ſection given a deſcription of the various ſymptoms of this diſeaſe, I ſhall now offer a few remarks upon the virus by which they are produced.

Of the real nature of the venereal virus no correct knowledge is obtained; and as it can never be procured in a ſimple ſtate we can ſcarcely expect that much ſatisfaction would reſult from any enquiries that could be made concerning it. We meet with it moſt frequently mixed with pus or mucus, and ſometimes with blood and ſerum; but ſo intimately is it blended with theſe fluids, and ſo little are we acquainted with the peculiar appearances of this matter, that we are not able to diſtinguiſh it. By ſome the matter of Lues Venerea has been ſuppoſed to be of an acid nature; others conſider it as alkali. One ſet of practitioners have ſaid that it is of putreſcent quality, while others aſſert the reverſe. It is evident, however, that all ſuch opinions muſt be merely hypothetical, ſo long as the matter to be inveſtigated cannot be made obvious to the ſenſes in an uncombined ſtate.

But although there may be ſome circumſtances relative to the matter of ſyphilis which we may never be able to explain, there are others which we can trace with ſome preciſion, and upon which I now mean to make a few obſervations. The circumſtances to which I ſhall advert reſolve themſelves into the following queſtions: Upon what parts does the matter of ſyphilis chiefly act in producing Lues Venerea? When received into the ſyſtem can the poiſon remain there without producing the diſeaſe? And is it poſſible for a perſon with the virus in a latent ſtate, and without any mark of diſeaſe, to communicate the infection to others?

Various opinions have prevailed upon the manner in which the matter of diſeaſes enters the conſtitution. Some contend that it is taken up ſolely upon the ſurface of the body; others that it enters perhaps entirely by the lungs; while ſome are of opinion that a great proportion of diſeaſes take their origin in the ſtomach and alimentary canal. But the point upon which pathological writers have chiefly differed is, Whether the matter of diſeaſe, when it has once entered the ſyſtem, acts moſt particularly upon the ſolids or fluids?

The humoural pathology, as it is called, prevailed univerſally for a great length of time. Diſeaſes were ſuppoſed to be ſeated chiefly, if not entirely, in the fluids; and ſo generally was this opinion received, that although others were occaſionally propoſed, they were conſidered only as innovations, and for the moſt part ſoon fell to the ground.

Of late, however, the oppoſite doctrine has begun to be more generally received, and it has become faſhionable to explain the phenomena of every diſeaſe, and the operation of almoſt every medicine employed for curing them, by their influence upon the ſolids. To me it appears that both opinions have been carried too far; and while one party have ſupported one opinion, and the other the very reverſe, that it is probable no diſeaſe of the conſtitution can take place without every part of the ſyſtem being affected. I think it evident, however, that every diſeaſe produced by contagion acts firſt upon the fluids, and that the ſolids are ultimately affected in a ſecondary way only.

In Lues Venerea this appears to be ſtill more clearly the caſe than can be demonſtrated in almoſt any other diſeaſe; a circumſtance, however, that tends to ſupport the general principle of the doctrine, even where this kind of proof cannot be obtained; for if it obviouſly happens in one diſeaſe where the matter of infection can be clearly ſhown to affect the fluids in the firſt inſtance, we have reaſon from analogy to conclude that it may likewiſe be ſo in others, al-

though it may not from a concurrence of circumſtances be in our power to ſhow it.

To enter fully upon the conſideration of this doctrine, a greater length of diſcuſſion would be required than the nature of this work will admit. I ſhall therefore only mention ſhortly ſuch circumſtances as tend moſt clearly to eſtabliſh the opinion which I adopt; and even this might have been unneceſſary if there was not reaſon to ſuppoſe that much inconſiſtent practice would be the conſequence of that opinion being admitted, which of late a great deal of pains has been taken to eſtabliſh.

Whatever may be the caſe in other diſeaſes, that the fluids are chiefly affected in Lues Venerea is rendered evident by the following circumſtances.

1. The contagious matter of this diſeaſe is always communicated in a fluid form. But it is alleged, although this is the caſe, that even upon its firſt application it ſhows a tendency to act chiefly upon the ſolids, by exciting inflammation wherever it is applied. This appears, however, to be only an accidental, not an eſſential property of the matter; for inſtances are frequent, as we have already had occaſion to remark, in which it enters the ſyſtem without inducing either inflammation or eroſion. By the acrimony which the matter ſeems to poſſeſs inflammation moſt frequently takes place on the ſpot to which it is applied, by which the correſponding abſorbents are with more certainty made to receive it than might otherwiſe be the caſe; but no other concluſion can be drawn from this. It happens here, as we have already had occaſion to remark on the practice of inoculating for the ſmall pox, that the matter of infection does not readily enter the ſyſtem where inflammation is not excited; but ſurely few will ſuppoſe that we would fail in producing either of theſe diſeaſes, were we poſſeſſed of any method of introducing the matter to the common courſe of circulation without exciting inflammation. Even this, however, has been alleged by ſome; but beſides other circumſtances which might be mentioned as proofs

of the contrary, the cleareſt evidence of it is obtained, and of inflammation not being eſſentially neceſſary for the production of ſmall pox, from the manner in which the natural form of the diſeaſe uſually appears, where no inflammation, or any other local affection is perceived, till the diſeaſe has taken place, when the firſt effects that occur from it are, fever, and quantities of matter thrown out upon the ſurface. This takes place in a more obvious manner in ſmall pox, but it alſo happens in Lues Venerea, in which a great proportion of the ſymptoms are evidently produced by contagious matter of a ſimilar nature to that which firſt entered the lymphatics at the time of infection, for the matter produced by venereal ulcers and eruptions will very certainly produce every ſymptom of the diſeaſe, if by any means it is thrown into the ſyſtem of a ſound perſon. Of this every practitioner, I preſume, is ſo much convinced, that even thoſe who have thought proper in theory to ſupport a contrary opinion would not willingly expoſe themſelves to the hazard of being infected with matter of this kind.

2. It has been a queſtion agitated with ſome warmth, in what manner does the virus act on being conveyed to the maſs of blood? At one period fermentation was conſidered as a principal agent in producing diſeaſe. The matter of infection being received into the circulation, it was ſuppoſed by means of fermentation to poſſeſs a power of converting the whole fluids of the body into its own nature. This opinion, however, was liable to various objections, and particularly to this, that it is difficult to conceive how fermentation can go on in fluids in circulation. In a ſtate of extravaſation we can eaſily ſuppoſe that it may happen; but while life ſubſiſts the fluids are kept in ſuch perpetual motion that we cannot eaſily conceive how ſuch a proceſs can take place. But although fermentation, in the full acceptation of the word, may not occur from this cauſe, I think it highly probable that the matter of

all contagious diſeaſes, and more eſpecially the matter of Lues Venerea, has a power of aſſimilating to its own nature a certain portion, and ultimately, perhaps, the whole fluids of the body.

3. This power may be quick or ſlow in its progreſs according to a variety of circumſtances, but which, from our limited knowledge of the laws of the animal œconomy, it may never be in our power to aſcertain.

4. While the quantity of matter thus aſſimilated is inconſiderable no marks of diſeaſe will be produced, nor will any effects reſult from it till it prevails in ſuch quantity as to be capable of exciting ſome degree of morbid irritability in the living principle.

5. From all this I conceive that in Lues Venerea the matter of contagion acts in the firſt inſtance upon the fluids, and that the ſolids are not otherwiſe affected, than in being excited by this morbid ſtate of the fluids to ſome degree of unuſual exertion for the purpoſe of throwing them off, by which eruptions on the ſkin are produced, with ulcers of different parts, as well as all the other ſymptoms of the diſeaſe.

6. From this view of the origin of Lues Venerea we account for the matter of contagion remaining longer inactive in ſome inſtances than in others. Beſides any difference which may take place in the ſtate of the fluids upon which the matter has to act, and by which the aſſimilation to which we allude may be accelerated or retarded, the different degrees of irritability which prevails in different perſons, and even in the ſame perſon at different times, will alſo co-operate in producing an early or latter formation of the ſymptoms; for while ſome are eaſily ſtimulated, and may therefore be acted upon almoſt as ſoon as the matter of contagion enters the ſyſtem, others of more ſluggiſh temperaments may, for the production of the ſame effect, require the matter to be accumulated in ſuch quantities as nothing but a great length of time can accompliſh.

7. It may be ſaid in oppoſition to this opinion, that as ſoon as this accumulated ſtate of morbid matter is accompliſhed the effects of it ſhould appear equally upon every part of the body; for the fluids circulating over the whole, the effects of any diſeaſe to which they are liable ſhould not

be confined to particular parts, as we find to be the caſe in Lues Venerea. To this it may be anſwered, that many inexplicable circumſtances occur in every diſeaſe, and that in this reſpect the venereal diſeaſe is not different from a variety of others in which particular parts are more apt to be affected than others, and where it is equally difficult to explain why they ſhould be ſo. Thus it is as impoſſible to ſay, why the matter of gout ſhould fix moſt frequently upon the great toe as it is to explain the cauſe of the throat and noſe being particularly apt to ſuffer in Lues Venerea. There may be ſome kind of attraction between particular parts and the matter of certain diſeaſes; or theſe parts may be more eaſily irritated than others, and which ever of theſe may be the caſe the ſame conſequences will enſue.

8. It is aſſerted by thoſe who ſupport the contrary opinion, that we cannot in any inſtance diſcover the cauſe of diſeaſe to be in the fluids. This indeed they are under the neceſſity of doing in order to give the appearance of probability to their theory in any caſe. By diſcovering therefore, that this aſſertion is ill-founded, and that in other inſtances the fluids are obviouſly affected, we might from analogy ſay, that they are ſo in Lues Venerea, were the proofs which we have adduced of it leſs evident than we have ſhown them to be. Now the action of ſeveral other poiſons is rendered evident to the ſenſes. This is particularly the caſe with the poiſon of different kinds of vipers, in which ſerious effuſions take place in different parts of the body, often in the courſe of a few hours from the time of the bite being inflicted, and in which the colour of the whole ſerum of the blood is even in that ſhort ſpace of time tinged of a morbid yellow colour.

9. They who are of opinion that the cauſe of diſeaſe is not ſeated in the fluids are under the neceſſity of denying in more inſtances than one, what in Lues Venerea is well known to be matter of fact. They are obliged to ſay that the blood is perfectly ſound, and that neither this fluid, nor any of the ſecretions produced from it are capable of communicating infection. A theory being once formed, every argument that militates againſt it is apt to be overlooked, while, in order to ſupport it, facts are explained a-

way in a manner which they will not bear. This, in some instances, may be followed by very pernicious consequences, particularly where such modes of reasoning are adopted and promulgated by authors of ingenuity and reputation; and as Mr. Hunter of London has gone farther than any other author in support of the opinion that the syphilitic virus cannot be conveyed by or affect the fluids, the following observations will relate particularly to his work*.

"We may observe (says Mr. Hunter) that even the blood of a pocky person has no power of contaminating, and is not capable of giving the disease to another even by inoculation; for if it were capable of irritating a sound sore to a venereal inflammation, no person that had this matter circulating, or had the Lues Venerea, could escape having a venereal sore, whenever he is bled, or receives a scratch with a pin, the part so wounded turning into a chancre, &c." Vide p. 292. Now Mr. Hunter here assumes as matter of fact what is not the case; for although all wounds inflicted upon patients labouring under Lues Venerea do not become venereal ulcers, yet frequently, and in almost every instance of the more advanced state of the disease they do so. I have at this time a gentleman under my care whose case affords an instance of this, where the bites of leeches applied to the scrotum on account of inflammation of one of the testes, the consequence of Gonorrhœa, degenerated into venereal sores. This I informed him would not have happened from Gonorrhœa alone. And upon enquiry he acknowledged that six months ago he laboured under chancres and bubo, for which he suspected that he had not used enough of mercury, and that for a week past he had felt uneasiness in his throat, where I found, on inspection, that an ulcer had already formed on one of the tonsils.

In the course of business I have met with a variety of similar cases, and every practitioner must have done so. It must be remarked, however, that we have seldom occasion to take blood, either with the lancet or leeches, in symptoms truly venereal. It is in Gonorrhœa chiefly that this remedy becomes necessary; a circumstance, I may observe, that affords a farther proof of the difference of the

* Vide a quarto edition, published in 1786.

two diſeaſes; for while the ſymptoms in Gonorrhœa are often ſo acute, and the inflammation ſo violent as to render it neceſſary to diſcharge a good deal of blood, this almoſt never happens in Lues Venerea, a diſeaſe in which the parts affected become red and of a copper-colour, accompanied with ſome degree of uneaſineſs, but in which that kind of inflammation requiring blood-letting ſcarcely ever takes place.

Mr. Hunter was reſolved, however, not to reſt ſatisfied with aſſerting that the blood of a venereal patient could not communicate infection. In the ſame page, viz. 292, he even ſays, that the matter produced by ſuch ulcers as occur in Lues Venerea is not venereal, and that it will not produce the diſeaſe. That there may be no ſuſpicion of miſtake on my part, I ſhall tranſcribe his words. "When the matter has got into the conſtitution it from thence produces many local effects on different parts of the body, which are in general a kind of inflammation, or at leaſt an increaſed action, occaſioning a ſuppuration of its own kind; it is ſuppoſed that the matter produced in conſequence of theſe inflammations, ſimilar to the matter from a Gonorrhœa or chancre, is alſo venereal and poiſonous. This I believe till now has never been denied, and upon the firſt view of the ſubject, one would be inclined to ſuppoſe that it really ſhould be venereal; for firſt the venereal matter is the cauſe; and again the ſame treatment cures both diſeaſes; thus mercury cures both a chancre and Lues Venerea; however, this is no deciſive proof, as mercury cures many diſeaſes beſides the venereal. On the other hand, there are many ſtrong reaſons for believing that the matter is not venereal. There is one curious fact, which ſhows it is either not venereal, or if it be, that it is not capable of acting in ſome reſpects on the body or ſame ſtate of conſtitution, as that matter does which is produced from a chancre or Gonorrhœa. The pus from theſe latter, when abſorbed, generally produces a bubo, as has been deſcribed, but we never find a bubo from the abſorption of matter from a pocky ſore; for inſtance, when there is a venereal ulcer in the throat we have no buboes in the glands of the neck; when there are venereal ſores on the arms, or even ſuppurating nodes on the ulna, there are no ſwellings of

the glands of the arm pit, although ſuch will take place if freſh venereal matter is applied to a common ſore on the arm, hand, or fingers, &c."

Now all this is ſuch looſe reaſoning as could not have been looked for in a man of Mr. Hunter's experience and obſervation. His overlooking every argument militating againſt his favourite theory can alone account for it. If the fact be not general no dependence can be placed upon it. If it be general it is not curious: neither is it the caſe that the matter of chancres and Gonorrhœa generally produces buboes. The matter of chancres often does, but it much more frequently does not; and few practitioners, I believe, will ſay that buboes are frequent conſequences of Gonorrhœa.

I cannot ſay what may have been the reſult of Mr. Hunter's experience, but I have met with many inſtances of buboes, or ſwelled glands, in the thigh, axilla, and neck, as obviouſly produced by ſores in the feet, legs, hands, and throat, as buboes commonly are in the groin from chancres on the penis. But admitting that the occurrence is not frequent, ſtill this is no reaſon for ſuppoſing that the matter of theſe ſores is not venereal. If the matter be not abſorbed no more harm will enſue from it than if it had never been formed; and in ſection II. of this chapter I have ſhown that it is not ſo frequently abſorbed as the matter of chancres. The reaſon of this I have alſo endeavoured to explain, by ſhewing, that ſome degree of irritation is required for the purpoſe of exciting the abſorbents to action; and as the matter of Lues Venerea ſeems to poſſeſs very little power of exciting irritation, excepting ſuch as is produced by the primary ſores of the diſeaſe, it is accordingly ſeldom abſorbed, and ſtill leſs frequently does it produce buboes; for being of a mild nature it does not ſo readily ſtimulate the lymphatics, ſo as to produce obſtructions in the glands as it goes along.

Mr. Hunter would have found it difficult, or even impoſſible, to explain conſiſtently with his theory of the diſeaſe, a number of circumſtances which we daily obſerve. He therefore denies that they exiſt; and he ſeems to have no difficulty in doing ſo, even where they are admitted by all unbiaſed practitioners. In page 291, he ſays, "It is alſo

ſuppoſed that a fœtus in the womb of a pocky mother may be infected, and have the diſeaſe from her, as it were naturally interwoven with it. This I ſhould doubt very much, &c." And in page 295, he ſays, "It has been ſuppoſed, and aſſerted from obſervation, that ulcers in the mouths of children from a conſtitutional diſeaſe, which conſtitutional diſeaſe was ſuppoſed to be derived from the parent, produced the ſame diſeaſe upon the nipples of women who had been ſucked by them, giving it as it were at the third hand; that is, the children were contaminated either by their mother's or father's having the diſeaſe in form of a Lues Venerea, of which I have endeavoured to ſhow the impoſſibility."

Mr. Hunter has certainly endeavoured to ſhew the impoſſibility of this, for his ſyſtem could not otherwiſe have had the leaſt plauſible appearance; but none, excepting ſuch as have not had opportunities of being able to form judgments for themſelves, will ſay that he has proved ſucceſsful. If I can give credit to any fact with which I am acquainted I muſt believe in this, that children may receive, and frequently do receive the venereal diſeaſe from their parents labouring under it in a conſtitutional form; and that ulcers in the mouths of theſe children will, and frequently do produce the ſame diſeaſe upon the nipples of women whom they ſuck. Nay, that theſe will give it again to other children, and theſe children to other nurſes; circumſtances which I have ſo frequently witneſſed, ſo ſtrongly marked, and followed by conſequences ſo diſtreſsful to innocent ſufferers, that I cannot help expreſſing aſtoniſhment that a practitioner of any experience ſhould entertain a doubt of their exiſtence.

Mr. Hunter, in page 296, proceeds to ſay, with ſome appearance of exultation, as judging it to be an unanſwerable argument, that "were it poſſible to contaminate once in this way it would be poſſible to contaminate for ever;" a circumſtance which he ſeems to conſider as ridiculous: But ſurely all this would happen. Nurſes and children infected in this manner would undoubtedly continue to communicate the contagion to others as long as they were not cured of the diſeaſe. Nor would there be any thing in

all this that does not daily happen; and in whatever way the diſeaſe is communicated we have reaſon to think that it would be the caſe.

In order I ſuppoſe to convince others that he himſelf at leaſt is convinced of the opinion which he ſupports being well founded, Mr. Hunter, in p. 12, goes even farther than any thing I have yet mentioned: That the venereal diſeaſe is to be propagated only by matter is proved every day, he ſays, by a thouſand inſtances. And in the belief of this being the caſe he afterwards obſerves, that he has gone ſo far as to allow married men who had contracted the diſeaſe to cohabit with their wives, in order to ſave appearances, and always with ſafety: Nay, that he could carry this ſtill farther, and allow a married man who has a Gonorrhœa to have connection with a ſound woman, if he took care to have all the parts cleared of matter, by ſyringing the urethra, making water, and waſhing the glans.

I believe with Mr. Hunter, and every practitioner perhaps will do ſo, that the riſk of communicating infection will not be ſo conſiderable where no matter is formed as where ulceration actually takes place: but I alſo know, that a woman would run much riſk of being injured by cohabiting with a man whoſe blood was infected with matter of ſyphilis, although no local marks of it ſhould appear, for I have met with various inſtances of it; and I alſo know from a variety of facts, that both father and mother, in ſituations ſuch as this, and where no bad ſymptoms were ever perceived, have communicated the diſeaſe to the fœtus. Where this has happened from the mother being infected, the matter of contagion muſt paſs from the mother to the child along with the blood; but where it takes place from the father, as is moſt frequently the caſe, there is no other mode by which it can be conveyed but by the ſemen. We ſhall have occaſion, however, to make ſome farther obſervations upon this ſubject when treating of Lues Venerea in new-born infants.

From all that I have ſaid, I think it will appear that the matter of contagion in Lues Venerea, in the firſt place, acts upon the blood alone; that by accumulation it comes to irritate the ſolids or con-

taining parts, and in this manner that effuſions and conſequent ulcerations are produced; that the venereal poiſon may remain long latent in the ſyſtem; that this will depend upon the irritability of the perſon, as well as upon the particular ſtate of the fluids at the time, by which they may be more or leſs liable to the aſſimilating effects of the matter of contagion; and laſtly, that there is no cauſe of doubt that a perſon with the virus in this latent ſtate, and without any external mark of diſeaſe, will communicate the infection to others.

SECT. IV.

Of the Remedies uſed in Lues Venerea.

§ 1. *General Obſervations.*

AS no diſeaſe has engaged more of the attention of practitioners than Lues Venerea, ſo there are perhaps none in which more remedies have been employed. Towards the end of the fifteenth century, when the firſt accurate deſcription was given of this diſeaſe, a great variety of remedies was propoſed for it; and as it daily increaſed in violence till the uſe of mercury was introduced, ſcarcely an article in the materia medica was left untried in the ſhort ſpace which elapſed between this period and the fortunate diſcovery of this powerful antidote.

Even long ſubſequent to this many new remedies were brought forth; for while mercury ſeldom fails of curing the diſeaſe, it was ſoon found to be productive of many inconveniences. Every country has accordingly been ranſacked, but after all the reſearches that have been made, the number of articles employed in modern practice for the cure of this

diſeaſe is very few ; and it is theſe only which I now mean to mention. The others, having been found either altogether inefficacious, or comparatively of weak powers to thoſe which are retained, have neceſſarily fallen into diſuſe, ſo that now it would be conſidered as ſuperfluous to ſpeak of them.

The only antiſiphilitic medicines now in general uſe are mercury, guaicum, ſarſaparilla, meſereon, and opium : Of each of which I ſhall ſpeak ſeparately.

§ 2. *Of Mercury.*

I. *General Obſervations upon Mercury.*

Mercury having been long employed for the cure of a great variety of herpetic affections, we are not ſurpriſed at finding it early introduced in the treatment of Lues Venerea, in which the moſt obvious of the ſymptoms chiefly affects the integuments of the body. Beſides, as it was univerſally known to be one of the moſt active medicines that had ever been made uſe of, we can eaſily ſuppoſe that practitioners would ſoon be induced to employ it for the removal of a diſeaſe which reſiſted the effects of every other Remedy.

Mercury in its crude ſtate is found to be nearly inert, or not capable of producing any active effect, inſomuch that it may be taken into the ſtomach in very conſiderable quantities. It has been ſwallowed to the extent of ſeveral pounds weight, and repeated daily for two or three weeks together with ſcarcely any effect being perceived from it ; ſo that wherever it has proved active when uſed in this ſtate as in a few inſtances has happened, it muſt probably have been in conſequence of its meeting with ſome unuſual degree of acidity in the ſtomach or inteſtines.

This inactivity of mercury in a crude ſtate ſeems to depend entirely upon its inſolubility in the fluids which it uſually meets with in the human body. In

this ſtate it either is not abſorbed, or if abſorbed, by not being ſoluble it remains inert.

I ſhall afterwards point out the different means employed for rendering mercury active, and for introducing it into the ſyſtem, but previous to this it will be proper to offer a few obſervations upon the ordinary effects of mercury, and upon the different opinions which have prevailed reſpecting its mode of action in curing the venereal diſeaſe.

II. *Of the Effects of Mercury upon the Human Body.*

One of the moſt certain effects of mercury is, that it acts as a cure for the venereal diſeaſe. It ſo ſeldom fails indeed, that when it happens not to ſucceed, as occaſionally is the caſe, we are apt to ſuppoſe that this proceeds either from the medicine not having been properly adminiſtered; from its not having been given in ſufficient quantity; or from the complaints for which it is uſed not being altogether venereal.

Beſides this, mercury is perhaps one of the moſt univerſal ſtimulants with which we are acquainted. Even in ſmall quantities it often excites heat over the whole body, quickneſs of pulſe, and other ſymptoms of fever.

It is alſo a very powerful evacuant. Other medicines act with equal certainty upon particular organs, of which we have examples in the effect of ipecacuan upon the ſtomach, and of jalap, aloes, and other purgatives upon the inteſtines; but we know of none which ſo generally affects all the ſecretions. Almoſt all preparations of mercury will act as purgatives. They alſo produce ſickneſs, naufea, and vomiting. They often excite an increaſed diſcharge of urine; and few medicines operate with more certainty upon the ſkin, for they can ſcarcely be employed without being productive of ſome degree of diaphoreſis.

The moſt remarkable effect, however, which we perceive from mercury is an increaſed diſcharge of ſaliva; and it is perhaps the only medicine which

from internal exhibition is known to act with any certainty upon this ſecretion. It firſt excites ſome degree of fœtor in the breath, which is often accompanied with a gentle nauſea, and very commonly with the taſte of copper. The gums become red, full, and ſomewhat tender. The ſalivary glands become hard and turgid, and at laſt an increaſed flow of ſaliva takes place, accompanied with a good deal of pain in chewing, and with a looſe vacilating ſtate of the teeth. For the moſt part this increaſed quantity of ſaliva bears ſome proportion to the quantity of mercury that has been exhibited; but this does not always happen, for occaſionally we meet with caſes in which a very great and long continued diſcharge of ſaliva is excited by the ſmalleſt doſe of mercury that is uſually given.

In ſuch inſtances, if the farther exhibition of the medicine be not managed with much caution, beſides a great flow of ſaliva, and ſwelling of the ſalivary glands, a very diſtreſsful tumefaction takes place over all the contiguous parts, and particularly of the tongue and fauces. This alſo happens wherever mercury is given in too great quantities, and eſpecially if the patient is ſuddenly and unexpectedly expoſed to cold or dampneſs. Where this takes place to any conſiderable degree the whole ſurface of the mouth over all the inſide of the cheeks, the tongue, uvula, and gums, are apt to ulcerate, and the matter which enſues from mixing with the ſaliva gives it both an additional fœtor and an ugly, ſanious appearance.

Beſides the uſual ſymptoms of fever mercury is apt to excite reſtleſſneſs, anxiety, general debility, and a very diſtreſsful irritable ſtate of the whole ſyſtem.

Theſe are the ordinary effects of mercury, and we ſhall preſently have occaſion to ſee that in the treatment of Lues Venerea one of the greateſt difficulties we meet with is the management of this medicine; for while the cure of the diſeaſe often requires it to be given in conſiderable quantities, the conſtitution is apt to be materially injured if it be not exhibited with the greateſt care and attention.

III. *Of the Operation of Mercury in the Cure of Lues Venerea.*

Various opinions have been offered of the action of mercury in the cure of this diſeaſe. It would be foreign to our purpoſe, however, to enter minutely into the conſideration of any of them. I mean therefore to make only a few obſervations upon ſuch as have been moſt generally received, and chiefly upon that which in my opinion ought to be adopted.

1. Some have imagined that mercury acts chiefly in the cure of Lues Venerea by exciting a diſſolved or putrid ſtate of the fluids, which they conceive to be a ſtate favourable for the peccant or morbid matter of the diſeaſe being thrown off from the ſyſtem.

The chief foundation of this opinion is the fœtor which we commonly perceive in the breath of patients under a courſe of mercury, and the increaſe with which it is uſually attended of almoſt all the ſecretions.

When we find, however, that whatever excites a quickened ſtate of the circulation is commonly productive of an increaſe to all the ſecretions, and knowing that a quickneſs of pulſe is a very common effect of mercury, we conclude, that upon this principle this effect of the medicine is more clearly explained than by any other opinion that has yet been ſuggeſted. Beſides, we know from actual obſervation that the blood, during a conſiderable part of a courſe of mercury, inſtead of being thin and diſſolved, is of a more firm texture than it uſually is in health. Mercury, when long continued indeed, never fails to excite much languor and debility, with many of the correſponding ſymptoms of a putreſcent or ſcorbutic diatheſis; but as many of the ſymptoms of ſyphilis are daily cured without this taking place, there is reaſon to ſuppoſe that this effect of mercury upon the ſyſtem is in no way neceſſary for the cure of the diſeaſe.

In confirmation of this we may remark, that all the ſlighter degrees of Lues Venerea are often removed, and in ſome inſtances cured, without even the ſaliva being increaſed in quantity or affected with fœtor: nay, a peculi-

arity of conſtitution ſometimes occurs in which we cannot induce either ſalivation or fœtor of breath by all the mercury that we dare venture to give, and ſtill the cure of the diſeaſe goes on, although not ſo ſpeedily, yet with equal certainty as if theſe ordinary effects of the remedy had been regularly induced.

2. The ſymptoms of Lues Venerea being conſidered by ſome as the effect of a peculiar irritation excited by the preſence of the poiſon in the ſyſtem, they have alſo ventured to ſay that mercury cures the venereal irritation, as they term it, by producing an irritation of a different kind*.

The reaſoning, however, which has been employed in ſupport of this opinion ſeems to be altogether hypothetical, and directly contrary to many facts which fall daily within our obſervation in the treatment of this diſeaſe.

Local pains may for a time be ſuſpended, or they may even be removed altogether, by irritation of a different kind being excited either in the contiguous or ſome more diſtant parts of the body; but we know of no conſtitutional diſeaſe that has hitherto been cured by ſuch means. This affords, therefore, much cauſe to ſuppoſe that the opinion is ill-founded when applied to the action of mercury in the cure of Lues Venerea; for when no ſuch effect is found to take place in other diſeaſes, we cannot, without the ſtrongeſt proofs were given of it, be led to imagine that any thing ſo very unuſual ſhould take place here. Mr. Hunter indeed gives as the chief reaſon which he ſuggeſts in ſupport of his opinion, that "the diſeaſe can in many caſes be cured by raiſing a violent ſtimulus of another kind."† I muſt ſay, however, that I never met with an inſtance of this, nor have I been able to hear of any who have done ſo; neither has Mr. Hunter, in treating of the method of cure, mentioned any article for the purpoſe of curing the diſeaſe in this manner.

The opinion ſeems to have ariſen from mercury being known to act as a very powerful ſtimulant; but although this will be very generally admitted, yet it is alſo well known that this ſtimulating effect is not only unneceſſary

* Vide Mr. Hunter's Treatiſe on the Venereal Diſeaſe.
† Vide p. 365.

for the cure of Lues Venerea, but that it is one of the moſt diſtreſsful occurrences that we meet with in the treatment of this diſeaſe, and that the more we can counteract it, conſiſtently with the quantity of the medicine to be given, the more certainly do we ſucceed. So evidently is this the caſe that it may be conſidered as one of the principal deſiderata in this branch of practice, a means of throwing mercury in an active ſtate into the ſyſtem, and in ſufficient quantity for the ſpeedy cure of the diſeaſe without producing theſe ſtimulating effects. Were we poſſeſſed of this the cure of Lues Venerea would be accompliſhed with eaſe, and probably in one half of the time that is now found neceſſary. With the aſſiſtance of anodynes we in ſome degree counteract the ſtimulating property of mercury, but the moſt powerful we can employ, even opium itſelf, is not altogether ſufficient; ſo that we ſucceed only by exhibiting the medicine in ſmall quantities, and interrupting the uſe of it altogether whenever it excites much fever, or proves otherwiſe ſo powerfully ſtimulating as to be productive of much uneaſineſs.

Another obvious proof may be mentioned of this ſtimulating property of mercury being in no degree neceſſary for the cure of Lues Venerea. From time to time we meet with conſtitutions in which none of the uſual effects of mercury are ever produced, and yet even in theſe it does not fail of curing the diſeaſe. We have already had occaſion to remark, that in ſome neither ſalivation nor fœtor of breath takes place from mercury; but I have alſo met with many in whom it acts with perfect certainty in the cure of Lues Venerea, although it neither tends to quicken the circulation nor to increaſe any of the ſecretions. In all ſuch caſes too the cure is accompliſhed with more eaſe than where mercury operates in the uſual way; and it is worthy of remark, that although all the more acrid preparations of mercury will cure the diſeaſe, yet their ſtimulating properties are found to be ſo hurtful and unneceſſary, that almoſt by the univerſal conſent of practitioners they are now generally laid aſide.

We may farther remark, that if mercury acted in the cure of Lues Venerea by the irritation which it excites, other ſtimulants ought alſo to do ſo; but we have not one

authenticated inſtance, either of a ſingle ſtimulant or of any combination of medicines of this claſs having ever accompliſhed a cure, and which we cannot ſuppoſe would have been the caſe were the opinion which we are now conſidering well founded.

3. Mercury being ſpecifically much heavier than any of the fluids of the human body, it was a prevailing idea with many that it operated chiefly in the cure of Lues Venerea by its weight. This opinion, however, ſeems to be equally ill-founded with the one we have juſt been conſidering. It has not been found that other articles of equal or greater ponderoſity cure this diſeaſe. It is difficult, or even impoſſible, to conceive that any medicine can prove uſeful merely from its weight; and we have no inſtance properly authenticated of mercury having ever been diſcovered in any of our fluids in a metallic form.

I may alſo obſerve, that the real weight of mercury that enters the ſyſtem in any caſe of Lues Venerea muſt, for the moſt part, be very inconſiderable. Where the more active preparations of it are employed this is particularly the caſe; but even where triturated mercury is uſed internally, the form now in common practice, we ſeldom find it neceſſary to exceed three or four drachms, and this requiring the ſpace of ſix, eight, or ten weeks, the quantity in the conſtitution at any one time muſt at all times be trifling.

4. The moſt prevalent opinion upon this queſtion at preſent is, that mercury cures the diſeaſe by the evacuations which it excites. This has been ſupported by much ingenious argument; and as it is known that mercury ſeldom exiſts in the ſyſtem without producing an increaſe of one or more of the ſecretions, we need not wonder at the preference which on a curſory view was given to it. I think, however, that it may be eaſily ſhewn that it is not in this manner that mercury acts in the cure of ſyphilis.

If this opinion were well founded mercury ought to prove uſeful or otherwiſe in proportion to the evacuation which it excites. At one period this was generally believed to be the caſe, and accord-

ingly the greateſt degree of ſalivation that a patient could bear was commonly adviſed; but now that the treatment of ſyphilis is better underſtood, it is univerſally known that this is not neceſſary, nay, in many inſtances that it tends evidently to retard the cure. It happens indeed, as we ſhall hereafter endeavour to ſhew, that ſome of the more inveterate ſymptoms of Lues Venerea cannot always be cured but with ſuch quantities of mercury as neceſſarily, in a great proportion of caſes, produce ſalivation to a conſiderable height. But we judge that this is merely an accidental property of the medicine, and not neceſſarily connected with the cure of the diſeaſe, from our being able to remove all the ſlighter degrees of it without exciting ſalivation, and from cures being in ſome conſtitutions obtained even of the moſt inveterate ſymptoms, without either the teeth, gums, or breath being affected.

Neither does it appear that the power of mercury in promoting any of the other ſecretions is in any degree uſeful in the cure of Lues Venerea; at leaſt inſtances frequently occur in which cures are accompliſhed without any ſenſible evacuation taking place. Nay, I have had evident proofs of a cure being retarded by mercury going too freely off by perſpiration; and we daily meet with inſtances of this where it affects the bowels ſo as to excite diarrhœa.

If mercury acted in the cure of ſyphilis by increaſing the ſecretions other evacuants ought occaſionally to cure it. But no inſtance of this has happened, while we cannot doubt but that it muſt have been frequently perceived if any advantage had ever been derived from them. The neceſſity of promoting one or other of the ſecretions for the cure of other diſeaſes is ſo frequent, and Lues Venerea ſo often takes place along with other complaints, that every doubt would long ago have been removed. If the opinion which we are now conſidering had been well founded every practitioner muſt have obſerved inſtances of the diſeaſe being cured by diaphoretics, diuretics, &c. but none will probably aſſert that they have done ſo.

We might, *a priori*, ſuppoſe, that ſyphilis cannot be cured by evacuants, but we know from experience that it is ſo, and that they do not even afford relief in any of the ſymptoms. We can eaſily conceive how thoſe diſeaſes that originate from affections of the ſolids, particularly ſuch as are produced by ſpaſm, or ſtricture upon the ſuface, may be much alleviated, or even altogether removed, by the operation of diaphoretics. By removing the cauſe the effect will commonly ſoon ceaſe. But where the ſymptoms are induced by contagion in the general maſs of blood, and where this contagion has a power of propagating itſelf, as we have ſhewn to be the caſe in Lues Venerea, it does not appear how they are to be removed by any evacuations. By the uſe of diaphoretics and other evacuants the quantity of fluids in the ſyſtem will no doubt be leſſened, but this will not alter the nature of thoſe that remain: If they were diſeaſed before they will ſtill continue ſo; for it is not alleged that medicines of this nature have the power of diſcharging thoſe parts of the blood that are diſeaſed and leaving ſuch only as are ſound, and yet this would neceſſarily be the caſe if the venereal diſeaſe could be cured by evacuants.

5. Of all the opinions that have yet been advanced concerning the operation of mercury in the cure of Lues Venerea, that which ſuppoſes it to act as an antidote is liable to the leaſt difficulty. This was long ago very univerſally admitted, nor was much doubt ever entertained of it, till attempts were made by theoretical writers to account for every diſeaſe, and for the operation of every medicine, upon ſuch general principles as are not often applicable in practice. Where principles of this kind are clear and evident they ought certainly to be adopted, but the ſureſt method of having them overlooked in every caſe is to attempt to introduce them in all. By doing ſo abſurdities muſt often be admitted which tend to invalidate the whole, and by which many are led to throw aſide reaſoning in all caſes, who willingly would go into it if our ſyſtems of theory were con-

fined to ſuch queſtions as it is in our power to explain.

Writers of this claſs deny the antidotal power of every medicine merely from their not being able to account for the manner in which they act. They do not conſider that many of the moſt common operations in chemiſtry are equally inexplicable. Thus no perſon can ſay why or in what manner the properties of an alkali ſhould inſtantly be deſtroyed by an acid brought into contact with it. I do not ſay that the operation of mercury in the cure of ſyphilis is analogous to this; but the one I think is equally incomprehenſible with the other, and that mercury acts in this diſeaſe conſiſtently with the idea which we affix to an antidote is at leaſt highly probable. What I conceive to be the property of an antidote, is, that when it comes in contact with the poiſon for which it is appropriated, it either renders it altogether inert or ſo far changes its nature that no dileterious effects are produced by it. Now it ſo happens that we can bring more deciſive proofs of this being the effect of mercury in the cure of Lues Venerea, than we might at firſt imagine would be in our power in accounting for the action of any medicine in the cure of any diſeaſe. Among other circumſtances which tend to eſtabliſh this the following may be enumerated.

1ſt, We know by experiment that the matter of Lues Venerea on being mixed with the triturated mercury is rendered inert, and will not produce the diſeaſe. The fact is recorded by the beſt authority, the late Doctor Cullen, who having ſupported more ably perhaps than any other perſon an oppoſite opinion, we are not to ſuppoſe that he would have given room to what militated ſo ſtrongly againſt it if he had not been convinced of the fact being well founded. His words are, "A phyſician took a quantity of matter from a venereal chancre, and mixing it with a quantity of Plenk's gummy ſolution of mercury, he applied this mixture to a ſound perſon, but could not find that it produced either chancre or any other ſyphilitic

ſymptom."* This fact of itſelf might be judged to be deciſive, but more complete conviction is obtained of its being ſo from every view that we can take of the chief phenomena obſerved to occur from the operation of mercury in the cure of this diſeaſe.

2dly, We have daily evidence of mercury curing venereal ſores not merely by acting upon the diſeaſe in the conſtitution, but on being locally applied to chancres and other ulcers.

In anſwer to this it is ſaid that theſe ſores may be cured by other articles beſides mercury. Allowing this to be the caſe, it is ſufficient for our purpoſe that they are more certainly and more ſpeedily cured by mercurial applications than by any others; a fact ſo notorious, that mercury in one form or other is now the chief dreſſing for chancres all over Europe. Copper has been much extolled for this purpoſe, but although I have uſed it in every variety of form it has never proved equal to the different preparations of mercury.

It is alſo ſaid that mercury does not always cure venereal ulcers, which it ought we are told, to do, if it acted as an antidote. This kind of cavil, however, requires no ſerious anſwer. We may regret that our medicines will not cure every diſeaſe, but all will allow that we are more certain of curing Lues Venerea with mercury than of removing any other diſeaſe by any remedy whatever.

3dly, Beſides theſe local effects of mercury upon the matter of Lues Venerea we have the cleareſt proofs that can be wiſhed for of its acting as an antidote to the virus through the whole progreſs of the diſeaſe. Nay, the very practice of thoſe who combat this opinion tends to evince it, although they do not ſeem to be ſenſible of its doing ſo. The firſt ſymptom of the diſeaſe that commonly ſucceeds to chancre is bubo, produced, as is now univerſally known, by the venereal virus being abſorbed and lodged in a lymphatic gland. Now it is acknowledged by all who have paid attention to the ſubject, that our beſt practice here is to bring the mercury we mean to employ as quickly as poſſible into contact with the virus lodged in the obſtructed

* Vide a Treatiſe on the Materia Medica by the late Doctor William Cullen. Vol. II. p. 448.

gland. Nay, of so much importance is it that this should be done, that although we may prevent the *system* from suffering, by throwing the medicine in a different manner, yet no other practice will prevent the virus from continuing to irritate the obstructed gland till it is at last thrown out by a complete formation of matter. Now in what manner does the mercury act here? It cannot be by dissolving the texture of the blood, for we have already shewn that this does not happen if it be not from a course of mercury being long continued, while buboes are often removed by a very short application of it. It cannot be by its weight, for a few grains of it often proves sufficient; and besides, it would have in most instances to act contrary to its own gravity. It is not by exciting irritation, under any kind of modification, for when mercury succeeds in resolving these tumours, the pain produced by the first formation of them very quickly subsides, while no irritation of any other kind ever succeeds to it. Neither does it act by exciting evacuation; nor could evacuations of any kind be of any avail. The disease is here in a local state: In the formation of bubo the matter does not necessarily enter the system, so that there is nothing to carry off. I therefore think we may fairly conclude that as the action of mercury in the cure of buboes cannot be accounted for in any other manner, and as we find from the testimony of all practitioners that it has no influence in resolving them, but when brought into direct contact with the venereal virus, that it proves effectual only by acting as an antidote to the virus. In my opinion this affords the clearest proof of its doing so that can possibly be given. It even removes the objection that has been stated to the antidotal power which we suppose mercury to exert in the cure of chancres, where it is said that these sores can be cured by other applications; for in the treatment of buboes no practitioner has ever ventured to suppose that they can be resolved by the absorption of any other remedy but mercury.

4thly, In tracing the effect of mercury upon the venereal virus still farther we have all along the clearest evidence of its acting as an antidote. In the treatment of many of the symptoms of syphilis, almost as soon as we can

ſuppoſe the mercury to have entered the ſyſtem, the ſame kind of relief is obtained which we experience from this remedy when it proves ſucceſsful in reſolving buboes. This is particularly the caſe in the venereal ſore throat, where a good deal of uneaſineſs generally prevails till mercury is given, and in which much relief is commonly obtained ſoon after it is employed, without any other irritation being excited, and often before the medicine has produced any evacuation whatever.

5thly, We conclude that the relief experienced from the internal uſe of mercury in the treatment of local venereal ſymptoms proceeds from the medicine coming in contact with the virus, in the firſt place, from our finding, as I have juſt obſerved, that it is analogous to what happens in the cure of buboes, where we know that the mercury is directly applied to the virus; and ſecondly, from our having convincing proofs of the medicine entering the circulation almoſt in every caſe in which it proves ſucceſsful, and therefore that it muſt be applied to every part that is diſeaſed. Some indeed have alleged that mercury never enters the circulation. In a metallic form this may perhaps be the caſe, but that the eſſential parts of it paſs into the ſyſtem is obvious, not merely from its influence in curing diſeaſes, but from the taſte which it gives to the ſaliva, although it be abſorbed at a diſtant part of the body; and from the effect produced by the exhalation of a perſon under mercury upon gold and ſilver carried in the pocket, which is exactly ſimilar to that which occurs from mercury being rubbed upon theſe metals.

6thly, It has been ſtated as an objection to this opinion, that the quantity of mercury employed for the cure of Lues Venerea is ſo ſmall that it is difficult to conceive how it can have any influence upon the general maſs of blood, to which it bears ſuch a ſmall proportion. To obviate this difficulty an ingenious opinion has been offered. As we perceive the venereal virus to produce effects chiefly upon particular parts, it is ſuppoſed that all that exiſts of it in the maſs of blood may be thrown out upon or be attracted by theſe parts, and therefore that the mercury employed in the cure, inſtead of acting upon the general maſs of

blood, may be ſuppoſed to exert all its influence upon the diſeaſed parts only.*

I think it more probable, however, from many of the phenomena of the diſeaſe, and it muſt undoubtedly be ſo if the opinion I have endeavoured to ſupport be well founded, that the whole maſs of blood is tainted in an equal degree while any part of the contagion remain in the conſtitution, and that the mercury employed in the cure acts equally upon every part of it. We know that the diſeaſe itſelf may be produced by a very ſmall particle of matter. We may juſt as readily ſuppoſe therefore that it may be cured by a ſmall quantity of any remedy that acts as its antidote; and it is perhaps equally difficult to explain the manner in which ſuch a ſmall portion of matter acts in aſſimilating quickly to its own nature ſuch a large proportion of our fluids, as it is to account for the manner in which the mercury operates which we employ for curing the ſymptoms produced by it.

Upon the whole, therefore, as the action of mercury in the cure of Lues Venerea is not accounted for by any other opinion that has yet been offered; as we have complete evidence of this diſeaſe being at all times the effect of contagious matter entering the blood; as the local effects of this matter are cured by mercury, whether they appear in the form of ulcers or by obſtructing the lymphatic glands; as no other remedy hitherto employed operates with any certainty, either in removing the matter from the blood, or in obviating the effects of it; as mercury ſeldom or never fails in curing ſyphilis, when it can be made to enter the blood, if it be not in the moſt advanced ſtages of the diſeaſe, or when Lues Venerea is connected with other diſeaſes, or with ſuch peculiarities of conſtitution as will not bear a ſufficient quantity of mercury; and as no inſtance perhaps can be adduced of a cure being accompliſhed where the preſence of mercury in the blood was not rendered obvious either by the uſual effects of it upon the mouth or upon gold and ſilver carried in the pocket, we have no reaſon to doubt of this remedy operating perhaps

* Vide Obſervations on Mercury, by Dr. Andrew Duncan, profeſſor of medicine in the univerſity of Edinburgh.

entirely as an antidote; that is, by rendering the matter of contagion inert or incapable either of exciting the diſeaſe, or continuing the ſymptoms even after the diſeaſe has been produced.

IV. *Of the Preparations of Mercury.*

We have already had occaſion to obſerve that crude mercury is not ſoluble in any of the fluids which it uſually meets with in the human body; and as no effects reſult from it while it remains in this inſoluble ſtate it has been conſidered as a very important object to prepare it in ſuch a manner that it may with moſt eaſe and ſafety be introduced into the ſyſtem in a ſoluble form. It unfortunately happens, however, that all the active preparations of mercury, I mean ſuch as prove effectual in curing the venereal diſeaſe, are apt to excite very diſagreeable ſymptoms, particularly ſalivation to a diſtreſsful height, purging, and general debility. Scarcely any point in practice has therefore met with more attention than the different methods of exhibiting mercury. Regular practitioners have in all countries been anxious to render mercury at the ſame time active and ſafe, while it has been the pride of every empirick to be able to boaſt of ſome new diſcovery by which this remedy may be given with freedom and ſafety without being deprived of any of its eſſential properties.

The preparations of mercury are accordingly very numerous: upwards of five hundred might be enumerated. The conſequence of which is, that much doubt and uncertainty has taken place concerning them; for while one preparation has been in common uſe with ſome practitioners, we find it entirely neglected by others; and in ſome countries preparations of mercury are employed daily which in others are very generally condemned.

This would lead to the concluſion of our being able to cure the diſeaſe with perhaps equal eaſe and ſafety with a great variety of theſe preparations, and this I believe to be in ſome meaſure the caſe. We are very apt to fall into a routine of practice, from which it is with ſome difficulty that we emerge, and which therefore every practitioner ought early in life to guard againſt. In no inſtance is the

want of attention to this more conſpicuous than in our practice in Lues Venerea, where the ſame practitioner very commonly perſiſts in the ſame method of exhibiting mercury, and is therefore ſoon induced to ſuppoſe that no other is equal to it, whereas were he to make trial of others he would find many by which the diſeaſe can be cured with equal eaſe, expedition, and certainty. To enumerate all the preparations of mercury that have been employed could anſwer no good purpoſe; and being unneceſſary, the attempt would be improper. I ſhall ſhortly mention, however, all ſuch as are in general uſe, with the views which practitioners have in giving a preference of one to the other.

It is found by experience that mercury may be rendered ſoluble, ſo as to prove active when received into the ſyſtem, by three different proceſſes; by trituration; by calcination; and by ſolution in a variety of acids.

Whether any property is communicated by any of theſe proceſſes to mercury which it did not before poſſeſs it may be difficult to determine. It would appear that they render mercury active nearly in proportion to the degree of ſolubility which they give to it; and this again ſeems to depend in a great meaſure upon the degree of ſeparation produced by theſe proceſſes between the different particles of the mercury: At leaſt this is clearly the effect of trituration. We have ſeen that in a crude ſtate this metal is altogether inert; and we find by experience that it proves active in proportion to the trituration employed upon it; and as by calcination and ſolution it is rendered ſtill more active than it can be made by triture alone, we conclude that theſe proceſſes are better calculated for producing a more complete diviſion of its particles.

By agitation alone mercury may be reduced to the ſtate of a powder, as was firſt attempted by Doctor Boerhaave, and afterwards by the very ingenious Doctor Saunders of London; but the length of time required for this being very conſiderable, practitioners have been accuſtomed to triturate the mercury

with ſuch ſubſtances as tend more effectually to keep the particles of the metal ſeparate from each other, by which, while the virtue of the medicine is not leſſened, the proceſs for obtaining it is much ſhortened. This, accordingly, is the foundation of various active preparations of mercury, of which the following are in moſt frequent uſe.

I. Where the mercury is triturated with unctuous ſubſtances, and uſed externally only, as is the caſe in the emplaſtrum hydrargyri of the London and Edinburgh diſpenſatories, and in the unguentum hydrargyri vel mercuriale.

II. Where it is tritured with gums, mucilages, and ſaccharine ſubſtances, and chiefly employed for internal uſe, as in the pilulæ hydrargyri pharm. Lond. and Edin.; in the ſolutio mercurialis gummoſa of Plenk; in the injectio mercurialis; and mel mercuriale.

III. Where it is tritured with dry calcerous powders, ſuch as crabs eyes, and prepared chalk, forming what is uſually termed mercurius alkaliſatus.*

Beſides theſe mercury might be tritured with ſeveral other ſubſtances with perhaps equal advantage. Sulphur alone ſeems to render it inert or nearly ſo. The more friction that is employed upon mercury mixed with any other ſubſtance the more active it becomes, while the more that it is rubbed with ſulphur the more inert it is rendered.

A very active preparation of mercury is obtained by means of heat; it is termed mercurius calcinatus, and is the baſis of different pills and powders. In this proceſs the mercury is reduced to a calx by long expoſure to a very conſiderable degree of heat.

Mercury is found to be more or leſs ſoluble in every acid, and the calx or ſalt obtained from theſe ſolutions gives the moſt active form of the remedy with which we are acquainted.

1ſt, Mercury combined with the muriatic acid gives, by different proceſſes, the mercurius ſublima-

* Preſcriptions for each of theſe, as well as for the preparation of every other article which I ſhall have occaſion to mention, will be given in the Appendix.

tus corrosivus, or hydrargyrus muriatus corrosivus; and mercurius dulcis, calomel, or hydrargyrus muriatis mitis; from the first of which are prepared the solutio mercurii spirituosa of Van Swieton; the aqua phagadenica and other watery solutions of corrosive sublimate of different authors, and pilulæ e mercurio corrosivo. From the latter, viz. mercurius dulcis, are prepared a variety of active formulæ both for internal and external use; but these differing only in the vehicles by which they are conveyed it is not necessary to enumerate them here.

2dly, With the acid of nitre, from which is prepared mercurius precipitatus ruber, the basis of various external applications; ungentum hydrargyri nitrati mitius, vel ungentum citrinum; and the pulvis mercurii cinereus.

3dly, With the vitriolic acid, with which we prepare turpethum minerale.

4thly, With the acid of vinegar, from which is prepared Keyser's pills; analogous to which is the terre feuillete mercurielle of Presslavin, prepared with mercury dissolved in the acid of tartar.

Mercury has also been dissolved in the acids of lemons, sugar, borax, arsenic, and spar; and in a greater or lesser degree it is soluble, as I have already observed, in perhaps every acid; but as every useful purpose of the medicine may be obtained from one or other of the foregoing forms, it appears to be unnecessary to enumerate more, particularly, as those who wish for farther information will readily obtain it in the various Dispensatories published in different parts of Europe.

It may here be proper to remark, that although all of these preparations are in appearance different from each other, yet all of them seem to have nearly the same effect upon the mercury. They tend all to reduce it to the form of a calx, and in proportion as the calcination is completely accomplished the medicine becomes active or otherwise. Even the trituration of mercury has the effect of reducing it to the state of a calx, and it is obviously in this manner that it is acted upon by acids; for when dissolved in acids, and the solution evaporated, nothing but a pure calx is observed to remain.

But although all of these preparations of mercury seem to be more or less active according as the calx which they produce is more or less perfect, there is however some manifest difference in the calces obtained from them. All of them produce the distinguishing characteristics of mercury upon the system: they cure the venereal disease, and they excite salivation; but this is done much more easily, and with less distress in the operation, by some of these than by others.

Of all the preparations of mercury those produced by trituration alone seem to be the best for general use. They cure the venereal disease with the same certainty as the others, and they are not so apt to affect the stomach and bowels; although the saline preparations of mercury, when the acid with which they are combined is completely separated from them, may, under proper management, be given with perfect safety, and with equal certainty of curing the disease. Corrosive sublimate mercury, as it is termed, is one of the most acrid of all the mercurial calces,* insomuch that scarcely any person can bear it in the dose of a grain, and in the quantity of a very few grains it acts as a poison; but even this very acrid remedy is rendered so mild by being deprived of the acid with which the mercury is united, that in the form of calomel it may with safety be given to the extent of several grains at once.† We find also that the saline calces of mercury prove in some degree acrid in proportion to the strength of the acid with which they are combined: hence all the combinations of mercury with the muriatic acid, with the acid of nitre, and the vitriolic acid, prove much more acrid than the calces obtained from mercury united with the acetous acid, or acid of tartar. It is therefore probable that if these preparations of mercury could be entirely deprived of their saline combinations, that they would not differ in any material point from the preparations obtained of this metal by trituration.

As yet however we have not been able by any process to which they have been subjected, to prevent them from operating very differently upon the human body, according to the kind of acid with which they are prepared.

* Vide Appendix, No. 8. † Vide No. 9.

Thus, while ſimple triturated mercury acts chiefly upon the ſalivary glands, mercurius ſublimatus corroſivus is more apt to act as a diaphoretic, and it readily excites nauſea and vomiting. The ſame preparation again, when more completely deprived of its acid, does not ſeem to affect the ſkin, nor in ſmall doſes does it ſo readily injure the ſtomach, while it acts with more certainty as a purgative. Indeed calomel, in proper doſes, is perhaps one of our ſureſt purgatives; and in order to act upon the ſalivary glands it muſt either be given in ſmall doſes, frequently repeated, or combined with opium or ſome other aſtringent. The mercurius cinerius is alſo apt to affect the bowels, while the combination of mercury with the vitriolic acid in the form of Turbeth's mineral, or hydrargyrus vitriolatus flavus, chiefly operates upon the ſtomach.

It is proper that in practice theſe different actions of the preparations of mercury ſhould be kept in view; for although all of them, as I have obſerved already, will, under proper management, cure the venereal diſeaſe, ſome advantage is occaſionally obtained from adapting them as much as poſſible to the nature of the ſymptoms for which they are intended. Thus, when a mercurial emetic is wiſhed for, we give Turbeth's mineral; calomel is always given as a mercurial purgative; and in particular affections of the ſkin corroſive ſublimate appears in ſome inſtances to ſucceed where other preparations of mercury have failed.

V. *Of the different Methods of exhibiting Mercury.*

In the cure of Lues Venerea, mercury, in every form, acts either locally upon particular ſyſtems or it enters the ſyſtem and cures the diſeaſe of the conſtitution. We ſhall afterwards have occaſion to ſpeak more particularly of the treatment of local affections; at preſent we ſhall attend chiefly to the different methods of throwing mercury into the ſyſtem.

Three different methods have been employed for exhibiting mercury; by conveying it in the form of fumes; by taking one or other of the preparations of mercury in-

to the ſtomach; and by applying them to the ſurface of the body.

The fumes of mercury are applied to the body by burning different mercurial calces in the patient's chamber. By thus breathing, as it were, a mercurial atmoſphere, and having the fumes equally applied to every part of the ſurface of the body, the uſual effects of mercury upon the ſyſtem are ſoon produced, more quickly perhaps than by any other method. Cinnabar is commonly employed for this purpoſe; but Turbeth's mineral, with the addition of ſulphur, and Æthiop's mineral, anſwers equally well.

Where it is meant to raiſe a ſalivation ſuddenly, or to throw mercury quickly into the ſyſtem, this is perhaps the ſureſt method of doing it; for with the fumes of mercury a ſalivation is ſometimes excited in the courſe of a few hours. This brought the practice into much reputation when ſalivation alone was conſidered as the chief part of the cure; but now when it is known that Lues Venerea may be cured without much ſalivation being excited; that the more gradually mercury is thrown into the ſyſtem the more effectually it operates; and that very violent effects are ſometimes produced by fumegating with mercury, the practice has of late been very generally laid aſide.

I think, however, that it may occaſionally be employed with advantage; and in different inſtances I have found this to be the caſe. I will not ſay that it ought ever to come into general practice, but I am clearly of opinion that it ſhould not in all caſes be laid aſide. The fumes of mercury being applied to venereal ſores will ſometimes forward a cure when every other preparation has been tried in vain; and I have met with a few caſes in which the mercury either went off too rapidly by ſtool when taken into the ſtomach, or where it was not abſorbed if applied in the form of unction to the ſurface of the body, and in which it ſoon proved effectual when uſed in this manner. It is particularly uſeful where venereal ſores are ſeated on parts of much importance; and where, from making a rapid progreſs, there is cauſe to dread that

they may prove hazardous. In ſuch circumſtances we ſeldom fail in giving a ſudden check to the ſymptoms by fumegating with mercury; but this is perhaps all that we ſhould expect from it. It is obviouſly of a more ſubtile nature than any other mercurial application. It therefore enters the ſyſtem more readily; but the effects produced by it are not uſually permanent. By a proper application of the fumes of mercury ſores may be healed ſpeedily, and the pains induced by venereal nodes very completely removed, and yet the diſeaſe will return in full force if this practice alone ſhould be truſted. When therefore it is judged proper, for the reaſon I have given, to employ mercury in this manner, and when the ſymptom for which it was employed is checked, the cure ſhould be completed by ſome other preparation, whoſe effects, although ſlow are more permanent, as very generally happens both from a proper application of mercurial ointment and from the internal exhibition of the common mercurial pill. In this manner much benefit may be derived from a remedy which ſeems to have been laid aſide without any ſufficient reaſon, and from our truſting to it alone when others ought to be given along with it.

The fumes of mercury may alſo be applied with ſafety. They appear to prove hurtful chiefly when received in too great quantity into the lungs, but this may eaſily be prevented by burning a ſmall quantity at once; and we may even confine the ſteam to the ſurface of the body, or to any particular part of it. Such boxes as are employed for confining the ſteam in vapour baths anſwer the ſame purpoſe here.

We have daily proofs of mercury entering the ſyſtem by being abſorbed from the ſtomach and inteſtines; but this mode of exhibiting the remedy is liable to one very important difficulty. Every preparation of mercury that has yet been invented is apt to irritate either the ſtomach or bowels, by which they not only excite ſickneſs and purging, but by depriving the patient of appetite he ſoon becomes much emaciated and debilitated. When puſhed far indeed the effects of mercury given in this manner are, in ſome inſtances very diſtreſsful. The ſtomach becomes

ſo much weakened that any food taken into it is either immediately rejected, or remains undigeſted, and the bowels are ſo entirely deprived of their tone that they ſeem to loſe all power of retenſion. Even when completely emptied a degree of teneſmus often takes place, from which a great deal of miſery is often experienced.

The preparations of mercury which do leaſt injury to the ſtomach and bowels are thoſe, as I have already obſerved, that are obtained by agitation or triture; but even they prove frequently troubleſome, and require always a good deal of management. They ſhould never be given in large doſes; and as ſoon as any degree of irritability is induced by them, either in the ſtomach or inteſtines, an opiate ſhould be given along with them. Of theſe preparations, the beſt and moſt convenient form is the blue pill of the Edinburgh diſpenſatory, of which four grains of the maſs, which contains one grain of mercury, being given three times a-day, will in moſt inſtances affect the mouth in a very ſhort time. Some conſtitutions indeed require more, but this ſeldom happens where the mercury has been ſufficiently triturated. Wherever much more than this has been given the mercury either has not been properly triturated or we may conclude that much of it has paſſed through the inteſtines without being abſorbed, or that the conſtitution of the patient reſiſts this effect of mercury.

Mercurius alkaliſatus, and Plenk's ſolution of mercury in mucilage of gum arabic, are nearly of the ſame nature with the blue pill, but they are both more apt to purge, particularly the latter, notwithſtanding of all that Plenk the inventor has ſaid to the contrary. When properly prepared no more mercury ſhould be given in either of theſe formulæ than in the mercurial pill; and as a much greater quantity is commonly directed, this can only proceed from neither of the preparations being made with ſufficient exactneſs, and from much of the mercury which they contain being left altogether inert by not being duly triturated.

Many will be ſurpriſed at the ſmall doſes of theſe articles which I have mentioned here, as more than double of this is commonly given. It is not uncom-

mon to adviſe ſix, ſeven, or eight of the blue pills daily; and twenty grains of mercurius alkaliſatus is recommended for a doſe.* Now I know from daily experience that the blue pill when properly prepared cannot be given in this quantity. I ſeldom give more than two pills a day, and very rarely above three; and in each pill, as I have obſerved, there is exactly one grain of mercury. But the maſs from which theſe are formed is prepared with much attention: they are triturated ſix or ſeven hours daily for thirty or forty days; and when the mercurius alkaliſatus is properly prepared it proves equally powerful; but it is difficult to ſeparate the particles of mercury when rubbed with a dry powder, that this preparation is now very generally laid aſide. It requires to be rubbed for at leaſt one hundred days, in order to bring all the mercury into a ſtate of activity.

Some are of opinion that mercurius calcinatus is equal in its effects to any of theſe preparations.† The doſe is a grain or two evening and morning, either in the form of a pill or powder. It will certainly cure the diſeaſe, and it puts a ſtop to the ſymptoms perhaps as ſoon as any other form of mercury; but I have ſometimes thought that its influence is not ſo permanent; that is, the ſymptoms have been more apt to recur after a ſufficient quantity of this medicine was ſuppoſed to be given. But ſo many facts are requiſite to aſcertain this that I cannot ſpeak deciſively about it. From all that I know of it, however, it does not appear to be equal to the blue mercurial pill. The eaſe with which it is prepared ſeems to be the only circumſtance in which it has a preference; but this is a point of little moment when put in competition with utility. A tendency which it has to act upon the ſtomach and bowels may for the moſt part be checked by the addition of a ſmall quantity of opium.

* Vide Mr. Hunter's Treatiſe on the Venereal Diſeaſe.
† Vide Appendix, No. 7.

Hydrargyrus muriatus corrosivus, commonly termed corrosive sublimate, when it does not affect the stomach, proves frequently a very useful medicine. It was never generally employed for internal use till the celebrated Van Swieton brought it into repute. It has since been much used in almost every part of Europe; and being easily disguised, and not so apt to salivate as other preparations of mercury, it has formed the basis of almost all the quack medicines that has of late been employed for the cure of this disease.

The form of using this medicine by Van Swieton is, however, the most nauseous of any. He advises it to be dissolved in spirits, and one or two spoonfuls, containing from a quarter to half a grain of mercury, or even more, is commonly given evening and morning; and this is directed to be continued till a cure is accomplished.* Few can bear it in this manner; for it not only affects the stomach, but in this quantity it is apt to excite diarrhœa. Neither can it be with safety given in powder, as it is not easily levigated so finely as to prevent it from acting mechanically upon the stomach. The best form of using it seems to be in a watery solution, and this may either be given in a mucilaginous mixture or mixed with broths, or the solution may be made into a mass with crumbs of bread, wheat-flour, or flour of liquorice, and divided into pills.† Instead of giving it in larger doses evening and morning, it answers better to give the same quantity divided into four or five doses. A grain of mercury may in this manner be given daily; that is, a quarter of a grain four times a-day. Some have advised more, but this is the largest dose that I have ever been able to continue for more than two or three days together.

Opiates have not the same influence in preventing corrosive sublimate from acting upon the stomach and bowels which they commonly have with other preparations of mercury. I have found nothing so

* Vide Appendix, No. 10. † Vide No. 11.

effectual for this purpose as decoction of guaicum and mezereon, or plentiful dilution with mucilaginous drinks and broths. These may act in the first place by sheathing the stomach and bowels directly from the effect of the medicine; and they may also prove useful by promoting the natural tendency which this form of mercury seems to have to pass off by the skin.

Mercurius dulcis, or calomel, is given by some in large doses for the cure of syphilis, even to the extent of ten grains daily*. I have not found, however, that this is necessary, and it very commonly proves injurious both to the stomach and bowels. It answers better in doses of a grain repeated three times a day, by which it more readily enters the blood than when given in larger quantities, and is less apt to be carried off by stool.

This form of mercury has long been in general use, and there cannot be a greater proof of its safety and utility than its being still preferred by many of our best practitioners. When as completely deprived as possible of its acid, I believe it to be one of our best saline preparations of mercury. In this state it commonly operates mildly, and is equally powerful with any other form of the medicine in curing the venereal disease.

Mercury in this form is best given in a bolus, in pills, or in powder, for it is scarcely in any degree soluble in water, and it is so heavy that watery fluids do not suspend it, so that it cannot easily be given in a mixture.

The pulvis mercurius cinereus is another very useful preparation of mercury.† It also requires to be given in a solid form. The dose is two, three, or four grains evening and morning. Some have advised more, but I have not found that in common practice more can with safety be given.

Hydrargyrus vitriolatus flavus, or turpethum minerale, is particularly apt, as I have already observed, to act upon the stomach; but even this form of

* Vide Appendix, No. 9. † Vide No. 15.

mercury may be ſo given as to cure the venereal diſeaſe and yet prove ſufficiently mild in its operation.* In doſes of five, ſix, or ſeven grains it acts as a violent emetic, but it may with ſafety be given to the extent of a grain, two or three times a day, particularly if each doſe be conjoined with half a grain of opium.

Hydrargyrus acetatus, or mercury combined with the acid of vinegar, is certainly more mild in its operation than any of the other ſaline calces of mercury; nay, it does not derange the ſtomach and bowels ſo much as triturated mercury is frequently found to do; but from all the trials that I have made of it, I do not conſider it as equally certain in curing the venereal diſeaſe. The ſymptoms abate while the patient is under it; but if ſome other preparation of mercury is not employed either along with it or continued afterwards, they are very apt to appear again ſoon after it is laid aſide.

I have judged it proper to take this particular notice of all the preparations of mercury now generally employed for internal uſe; and from what I have ſaid, it will be obvious that ſome of them are for ordinary purpoſes preferable to others. In common practice, the preparations of mercury obtained by triture, and particularly the blue mercurial pill, will be found to be the beſt. But as caſes ſometimes occur which do not readily yield to any one form of medicine, we are under the neceſſity of having recourſe to others; and from what we have already had occaſion to remark, the choice may be readily determined. We ſhall beſides have farther opportunities of ſpeaking upon this point when we come to treat of the cure of the different ſymptoms of the diſeaſe.

But although we may in a great proportion of caſes be able to cure the diſeaſe by one or other of theſe forms of mercury, and in moſt inſtances without any injury to the conſtitution, yet we find that even the mildeſt preparation we can employ, and under whatever caution it may be given, is occaſionally apt to affect both the ſtomach and

* Vide Appendix, No. 16.

bowels in such a manner that we are under the necessity either of giving it in too small quantities for the purpose of curing the disease, or of laying it aside perhaps entirely, in order to make trial of the medicine in some other form.

Our surest method of obviating this effect of mercury is to apply it to the surface of the body only, a practice which ought as much as possible to be adopted, and to which the chief objection is, the trouble of applying it. The advantages, however, which attend it are so great that every objection of this kind should as much as possible be made to give way to it. A patient may be so situated that he cannot use the medicine in this way; and instances occur occasionally in which the mercury is not readily taken up by the absorbents on the surface of the body. In both of these cases we are under the necessity of giving it inwardly; but scarcely any other good cause can occur for it. Nor would either of these be frequent if the advantages of the practice were sufficiently explained to our patients, and due attention given to the proper application of the mercury. It sometimes indeed happens that mercury does not easily enter the system in any form, and does not in the usual time affect either the salivary or other excretory organs. In such cases, where the symptoms of the disease are urgent, we should not be confined to any one method of cure, and the medicine should be given in every form in which it is likely to prove useful; but it is proper to remark, that failures of this kind are much more frequent from the internal exhibition of mercury than from the outward application of it, and which is another important advantage that we derive from using it in this manner. Different reasons indeed may be mentioned for this being the case; the readiness with which mercury given by the mouth is carried off by stool; the great quantity of food with which it is often mixed in the stomach, and by which we may suppose that a considerable part of the small quantity that we dare ever venture to give in this manner is prevented from coming into contact with the absorbents of the intestines; and lastly, the great extent of surface to which we can apply it externally.

By some it is alleged as an objection to this mode of using mercury, that we cannot exactly ascertain the quan-

tity that enters the ſyſtem. This, however, holds equally ſtrong againſt every way in which we can give it, nor is it a point of any importance. It is not ſo much by the quantity we employ, as by the effects which reſult from it, that we ought to be directed. The uſual effects of mercury upon the mouth, and in the cure of the different ſymptoms of the diſeaſe, will, with ſome patients, take place from half the quantity of medicine required by others; but were it an object of much more importance than it appears to be, I do not ſee how the quantity of active mercury entering the ſyſtem, in any way we may uſe it, can be aſcertained.

It is alſo mentioned as an objection to the external uſe of mercury, that it is more apt to excite ſalivation than when given by the mouth. This, however, is not ſo much an objection to the practice as to the mode of conducting it. Mercury uſed in this manner enters the ſyſtem for the moſt part ſo readily, that thoſe who have not been accuſtomed to preſcribe it, are no doubt apt to be deceived with it. It proceeds quickly to the ſalivary glands, and is thus more apt to excite ſudden ſalivation than when taken into the ſtomach; but this proceeds altogether from inattention, and may always be prevented by applying the mercury in ſmall quantity at firſt, and increaſing it according to its effects. Our being able to affect the ſyſtem more ſpeedily by the external application of mercury ſhould be conſidered as another advantage of this mode of exhibition; for the ſymptoms of ſyphilis in ſome inſtances advance ſo rapidly that it is an object of importance to check them as quickly as poſſible. Salivation appears to be the effect of a certain quantity of mercury in the ſyſtem, in whatever way it is introduced. Some of the more acrid preparations paſs off indeed more readily by other emunctories, but the milder forms of the medicine, and which I have endeavoured to ſhew, ought in moſt inſtances to be preferred, are equally ready to excite ſalivation. It is true that more time is required to throw the quantity into the ſyſtem that is neceſſary for this purpoſe by one mode than by another, but when this quantity is introduced the effect of the mercury upon the glands of the mouth is uniformly the ſame in whatever way it is accompliſhed.

Upon the whole, therefore, all the objections that have been made to this method of exhibiting mercury are trifling when compared with the advantages it poſſeſſes over every other mode of uſing it, ſo that for general practice it ought to be preferred.

I own indeed that at one period I was of a very different opinion upon this point; but this proceeded from my not being ſo well acquainted with the ſuperior advantages of uſing mercury in the form of unction as I now am, and which I now therefore very generally prefer.

Mercury will paſs into the ſyſtem in various forms from the ſurface of the body. Lues Venerea has been cured by frequent immerſions of the feet and legs in a ſolution of corroſive ſublimate. The application of a mercurial plaiſter to the ſurface of the body, if of any conſiderable extent, will alſo cure the diſeaſe; and we are indebted to Mr. Clare of London for a third method of throwing mercury into the ſyſtem from the ſurface.* By rubbing calomel into the inſide of the cheeks Mr. Clare found, and his obſervations have in ſome degree been confirmed by experience, that we can not only excite ſalivation by this means, but cure every ſymptom of ſyphilis. Nay, the rubbing of a few grains of calomel upon the inſide of the preputium or labia pudendi ſoon affects the ſyſtem and excites the mercurial fœtor in the breath and ſoreneſs of the gums. But although I have found this in ſome inſtances to be true, the practice has alſo in ſeveral of the trials I made of it failed entirely; that is, it did not cure the ſymptoms for which it was employed, and which were afterwards removed by other preparations of mercury. I muſt own, however, that the experience I have yet had of this method of uſing mercury does not entitle me to ſpeak deciſively concerning it; but I conclude either that ſimilar failures, or ſome other objections of importance, have occurred to it in the practice of others, for we do not now hear that it is employed, although Mr. Clare's book has been publiſhed upwards of twelve years.

One obvious cauſe of this, and of the other modes I have mentioned of applying mercury externally

* Vide an Eſſay on the Cure of Abſceſſes by Cauſtic, &c. alſo a New Method of introducing mercury into the Circulation, by P. Clare, Surgeon.

falling into diſuſe is, that all of them ſeem to be much inferior to the method of introducing it in the form of an ointment, and which was the firſt, I may obſerve, that was employed for the cure of Lues Venerea. It is commonly termed the method of cure by unction, or inunction.

An ointment for this purpoſe may be made with different proportions of mercury; but the beſt I have tried is that in which there are two parts of the unguent to one of crude mercury. In the form commonly uſed the ointment and mercury are in equal parts; but the other, while it proves equally powerful, if it be applied over a greater ſurface, has the advantage of not being ſo apt to irritate the ſkin.

In order to promote the abſorption of the mercury it has been the practice with many to adviſe the body to be immerſed in a warm bath, once and again, before the courſe is commenced, and to repeat it once or twice a week during the whole continuance of it. They likewiſe think that the bathing proves uſeful by giving the mercury a particular determination to the ſkin, and thus preventing it from producing ſalivation. I have not found, however, that a frequent uſe of the warm bath is neceſſary. It cannot in every ſituation be obtained but with much difficulty, and if not very properly conducted it is apt, during a courſe of mercury, to expoſe the patient to ſuffer from the effects of cold.

Before the commencement of the courſe, where the ſkin is particularly dry, I have ſometimes thought it right to adviſe the uſe of a warm bath, but as in other inſtances of a ſimilar nature the remedy has anſwered equally well where this precaution was not taken, I do not conceive that it is of much importance, and I now ſeldom employ it.

Where the remedy is chiefly employed for the removal of a local affection, ſuch as bubo, we endeavour to make it paſs through the lymphathic veſſels of the part, and in ſuch caſes this determines the place to which the ointment ſhould be applied; but where no local ſymptom of this kind takes place it may be

applied with equal ſafety and propriety to any part of the body, and the place of application ſhould be changed from day to day. By this means we obviate the irritation of the ſkin, which is apt to happen from applying it repeatedly to the ſame place, at the ſame time that we promote the abſorption of the mercury. I may alſo remark, that although, for the reaſons I have given above, it does not appear to be neceſſary to immerſe the whole body in a warm bath during a courſe of mercury, yet that ſome advantage is occaſionally derived from cauſing the parts upon which the ointment has been rubbed to be well bathed with ſoap and water before repeating it upon the ſame place. It may therefore be proper to adviſe this to be generally done.

In applying the ointment, ſome have imagined that we need only lay it upon the ſkin, and that it will enter the abſorbents with equal certainty whether friction is uſed or not. This, however, is by no means the caſe. I have repeatedly put it to the teſt of experiment, and it evidently appears that abſorption is promoted by gentle friction. This indeed is ſo conſonant to general experience, that ſome may be ſurpriſed at my taking notice of it, nor would I have judged it neceſſary if the contrary opinion had not of late been ſupported by authority of ſome weight.

When the patient is able, the friction ſhould be applied with his own hands: Otherwiſe it muſt be done by an aſſiſtant, his hands being covered with a thin bladder. For want of this precaution, the aſſiſtant is apt to be ſalivated while the patient is deprived of a portion of the mercury. According to the nature of the caſe, from a drachm and a half to two drachms of the ointment ſhould be rubbed in daily, and it anſwers better to apply it at two different times than all at once. For the purpoſe of applying properly this quantity of ointment, that is from forty-five grains to a drachm, twenty or twenty-five minutes of gentle friction is neceſſary, the patient while under it being expoſed to the heat of a moderate fire.

VI. *Of the Duration of a Mercurial Courſe, and the Quantity of Mercury to be exhibited.*

In the preceding parts of this ſection I have enumerated the different preparations of mercury which chiefly merit attention, with the doſes of each, which may with ſafety be employed. I am now to offer a few obſervations upon the quantity of mercury to be given, and the length of time to which a courſe of this medicine ſhould extend; queſtions of the firſt importance in the treatment of the venereal diſeaſe.

As ſalivation is one of the moſt obvious effects of mercury, practitioners began very early to imagine that the morbid matter of Lues Venerea was carried off in this manner; and at laſt it was generally believed that a cure could not be obtained if a very conſiderable diſcharge of ſaliva did not take place. In conſequence of this every patient labouring under Lues Venerea was made to ſalivate; and as it was thought to be of importance to have this quickly accompliſhed, mercury was immediately applied in the moſt effectual manner for this purpoſe. It was either preſcribed in large doſes, and theſe frequently repeated by the mouth, or frictions with ſtrong mercurial ointment were applied over the legs and arms, and in ſome inſtances even over the whole body.

In this manner the ſyſtem was very quickly charged with as much mercury as it could bear, and for the moſt part a cure of all the ſymptoms was no doubt effected: But the ſudden manner in which this great quantity of mercury was introduced, and the violent evacuations which it excited, together with the low regimen with which it was commonly accompanied, reduced even the ſtrongeſt conſtitutions to a degree of debility from which they ſeldom entirely recovered; ſo that a great proportion of all delicate people ſunk under it.

A courſe of mercury, conducted in this manner, became therefore nearly as formidable as the diſeaſe for which it was preſcribed, and no other remedies being diſcovered the ſame practice was ſtill purſued, till a conſiderable time after the commencement of the preſent century. About this period ſome abatement of this rigorous courſe was introduced; but it was not till of late years that any material innovation took place in it.

This may be conſidered as one advantage among others that might be mentioned, which we have derived from rational theory. Some practitioners ſuſpecting that the ſalivary diſcharge produced by mercury could not probably be the means by which the cure of Lues Venerea was accompliſhed, and ſome trials which favoured this ſuppoſition being made, they ſoon came to think that all the ſymptoms of the diſeaſe might be removed with much leſs mercury than had commonly been employed. If the change of practice, which occurred as a conſequence of this opinion, had reſted here, much advantage would have been derived from it. But this was not the caſe. In every attempt to introduce an alteration, while we endeavour to avoid one extreme we are apt to fall into another. The inconveniences and diſtreſs induced by mercury in the way in which it had formerly been given being ſo great that every patient was much afraid of being put under it, any alteration that was propoſed for leſſening their ſufferings was moſt readily adopted, and practitioners perſuading themſelves that it might be done with ſafety, and wiſhing to adopt the treatment of the diſeaſe to the feelings of their patients, they unfortunately allowed this to carry them too great a length. So far as the eaſe and comfort of a patient is conſiſtent with his ſafety he is certainly entitled to it, but more than this he ſhould not be indulged in. There is much cauſe, however, to think that this has happened in the change of practice which has taken place in Lues Venerea. Inſtead of the full ſalivation that patients were formerly put under, and the ſtrict confinement with which this was accompanied, a courſe, commonly termed alterative, was judged ſufficient. In this, if the mercury is allowed merely to be felt in the breath, or by the ſlighteſt ſoreneſs of the gums, it is never permitted to go farther,

and the patient, in a great proportion of cafes, is allowed during the whole time that he is taking it to go abroad. That this will prove fufficient in many flight infections, and that it will even anfwer in many cafes of a worfe nature, if the courfe is carried to a proper length, I know from experience is true; but I alfo know that it ultimately fails in a great proportion of cafes that are more inveterate and of long duration. Even in thefe it foon gives a check to all the fymptoms, and will often make them difappear entirely; but wherever the fyftem is deeply injured, particularly if the difeafe has attacked the bones, although a cure may in fome inftances be completed by fuch a courfe, and in all of them may be apparently obtained, yet in many the difeafe will afterwards break out again, and in all, even the firft removal of the fymptoms will be protracted to a much greater length than if more mercury had been given.

When I firft engaged in practice the treatment of Lues Venerea upon this plan was by many adopted in its fulleft extent, and I muft own that few went more freely into it than I did. The opinion of falivation being unneceffary, and that an alterative courfe was fufficient, had not only been taught in the fchools of medicine, but the practice had been adopted by many of our beft phyficians and furgeons. Beginners therefore went readily into it; but if others from farther experience have been led to form the fame opinion of it which I have done it will foon, except in the flighteft cafes, be generally laid afide. The refult of all my experience is, that I am now fully fatisfied that to render general practice in the venereal difeafe fafe; that is, to guard as much as poffible againft a return of the difeafe, a middle courfe muft be obferved between the fevere degrees of falivation which our forefathers judged neceffary, and the oppofite extreme into which the moderns have fallen.

In cafes of a flight nature, that is, in the incipient ftate of mild chancres, what is commonly termed an alterative courfe will be found fufficient. If the mouth be rendered gently fore, and kept in this ftate for eight or ten days after the chancres are cured, no more will be neceffary. But even in the treatment of chancres only, if they have been of long duration, or not of the mildeft kind, and in every

other ſymptom of the diſeaſe, the mercury ſhould in a gradual manner be given ſo as either to induce a very conſiderable degree of ſoreneſs in the mouth, and which in moſt inſtances will be attended with an increaſed diſcharge from the ſalivary glands, or when from peculiarity of conſtitution this cannot be induced, we ſhould perſiſt in the uſe of mercury till the febrile ſymptoms which it uſually excites are brought to as great a height as the patient can eaſily bear. It will generally indeed be perceived that thoſe ſymptoms of the diſeaſe to which I allude cannot be cured but with ſuch a quantity of mercury as perhaps in every inſtance excites heat, quickneſs of pulſe, anxiety, and reſtleſſneſs, and in proportion as the patient is able to bear theſe in a greater or leſſer degree the ſooner and more effectually will he get free of the diſeaſe.

I have already obſerved that I give a general preference to the method of cure by unction; but whatever preparation of mercury we make uſe of, it ought, in ordinary caſes, to be puſhed in a gradual manner to the extent I have mentioned; and when as much of it is employed as is ſufficient for this effect, it ought to be continued ſo as to keep the ſyſtem in an equal degree under its influence, not only till all the ſymptoms of the diſeaſe are removed, but for ſome time thereafter. This will in different caſes happen at different periods of a courſe, and with very different quantities of mercury. It is therefore obvious that nothing deciſive can be mentioned, either of the length of time to which a mercurial courſe ſhould extend or of the quantity of the medicine that ſhould be given. Our ſureſt, and perhaps only guide that ſhould be truſted, is the reſult of experience in ſimilar caſes; and as the certainty of guarding againſt a relapſe is a point of the firſt importance nothing ſhould ever be left in doubt that may be required for this purpoſe. In all primary affections, that is, in chancres and buboes only, and where no other ſymptom of the diſeaſe has appeared, I have found that a courſe of mercury conducted in the manner I have mentioned, and continued for a fortnight after the ſymptoms have diſappeared, has at all times proved ſufficient; but wherever the ſkin, throat, or bones have been affected, I now always adviſe the remedy to be perſiſted in for the ſpace of a

month after the cure is apparently completed. I cannot positively say that less than this would not do, but in a matter of such moment, where the health and happiness not only of the patient but of his progeny are at stake, it is better to exceed by giving occasionally somewhat more than might be necessary than incur the smallest risk of the poison being ever to appear at any future period.

I have said that in ordinary practice the mercury should be pushed in a gradual manner to the extent to which we mean to carry it; that is, a small quantity should be employed at first, and gradually increased till the full effects expected from it are excited, by which we not only avoid the inconveniences which always occur from a salivation being suddenly induced but are thereby enabled to throw in a much greater quantity, and to keep the system more completely under its influence during the whole course than we ever can do when much mercury is given at once; and this, I may observe, is a point of the first importance in the treatment of syphilis, for whoever has paid attention to the subject must have perceived that our success depends in a great measure upon the effects of the medicine being fully and regularly kept up during the whole duration of the course, and which can seldom be done where it is not given in a gradual manner at first. When the fever, salivation, and other symptoms become severe, and which they are very apt to do when the mercury is given in large quantities at first, an interruption must necessarily take place, and it is the effect of every interruption to protract the continuance of the course and often to deceive both the practitioner and patient. My opinion, in short, upon this point is, that our certainty of obtaining a speedy and permanent cure of any symptom of Lues Venerea is not merely in proportion to the quantity of mercury we employ, but to the quantity which in an active state can be thrown into the system in a given space of time.

But while with a view to this I have advised that in common practice mercury should be given at first in a gradual or slow manner, it is proper to remark that cases are sometimes met with in which it is necessary to adopt a different practice. Wherever the symptoms of the disease are particularly urgent, from their being deeply seated in parts of

much importance, and from the progreſs which they are making being rapid, we are juſtified in deviating from this general rule, and in applying the mercury in ſuch a manner as will moſt ſpeedily get it in a very ample quantity thrown into the ſyſtem. In this way a check will ſoon be given to the farther progreſs of the diſeaſe, when the medicine, during the reſt of the courſe, may be given in the gradual manner which I have juſt pointed out.

The time to be employed in a courſe of mercury, and the quantity to be given, are circumſtances, as I have already obſerved, that cannot with any exactneſs be aſcertained. They depend in a great meaſure, as we have had occaſion to remark, upon the effects with which they are attended, but I may obſerve in general, that few caſes are ſo bad as to require the medicine, when properly conducted, to be continued longer than nine or ten weeks. In recent caſes four or five weeks are for the moſt part ſufficient; while in ſome obſtinate old affections, where the bones have either been diſeaſed, or the ulcers very foul and extenſive, I have known it neceſſary to go on to the twelfth or thirteenth week.

During theſe periods ointment of the ſtrength I have mentioned may be rubbed in from the quantity of three ounces to eight or ten. When the blue mercurial pill is employed and properly prepared the quantity may vary from four or five drachms to two ounces, or even to two and a half or three ounces. Whenever theſe quantities are exceeded there is much cauſe to ſuppoſe that a great proportion of the medicine has not entered the ſyſtem, either from the improper method of applying it or ſome other cauſe.

The opinion which I have thus ventured to ſuggeſt of the effects of mercury depending chiefly upon the quantity which in an active ſtate can be thrown into the ſyſtem in a given ſpace of time, will, at firſt, be doubted by many. Being contrary to the practice which now generally prevails, few may be inclined to follow it, but thoſe who do will have the ſatisfaction to find that by means of it they render their patients much more ſecure than can poſſibly

be done in any other manner. By giving as large a quantity of mercury as the patient can with safety bear, they will find that the most inveterate symptoms of the disease may be cured in much less time, and with much more certainty than they usually are by an alterative course, which, however well it may be adapted for the cure of the slighter symptoms of syphilis, is by no means sufficient for the removal of the more advanced stages of the disease.

Many practitioners think that the same quantity of mercury must prove equally useful in whatever time it may be given, provided the mouth be kept moderately sore during the whole period. This, however, is not the case. I have met with various instances of venereal sores, as well as other symptoms, which had either obstinately resisted a very long continued course of this kind, or which had recurred from time to time after a cure had been supposed to be obtained, and which at last were entirely removed by a much less quantity of the medicine being given in a shorter period. What I wish to inculcate is, that the more inveterate symptoms of the disease will seldom yield to an alterative course of mercury, however long it may be protracted, while the same quantity of the medicine will seldom fail, when given so as to keep the system for a shorter period more completely under its influence. I have now the history of more than fifty cases in which this actually happened; where venereal sores, from resisting mercury under an alterative course, were judged to be incurable, and where complete cures were afterwards obtained merely by carrying the use of mercury to a greater length than had previously been done.

VII. *Of the Regimen to be observed during a Course of Mercury.*

It was formerly the practice and still is in some parts of Europe, to put every patient while taking mercury upon a low diet, and previous to the com-

mencement of the courſe blood-letting and purgatives were preſcribed.

When it is neceſſary in a full habit of body to throw in any conſiderable quantity of mercury very quickly, and eſpecially when it is known that the patient has been liable to inflammatory complaints, ſome previous evacuation is proper, and the patient during the firſt part of the courſe, ſhould be kept upon a low allowance. But in general there is no cauſe for this, and the cure proceeds with leaſt difficulty when the patient is kept upon his uſual diet. It is the effect indeed of mercury to produce weakneſs in ſuch a degree, that if not counteracted by nouriſhing diet, it is apt to injure the conſtitution materially. Of this I have met with ſo many inſtances, that unleſs where ſome ſtrong objection occurs to it, I always deſire patients under mercury to live as well as a perſon in health ought to do. A full allowance of animal food would in moſt inſtances be improper, but I have never obſerved any harm occur from a plentiful uſe of any other article that did not diſagree with the ſtomach and bowels. When mercury is taken by the mouth acid vegetables are apt to do harm; but there is no cauſe for avoiding them when the cure is conducted by unction.

Patients under mercury are commonly deſired to avoid wine and even malt liquor. A great quantity of either ought never to be given; but in moderate quantities they may be uſed with ſafety. Different opinions have alſo been entertained reſpecting the propriety of patients going abroad while under mercury. So far as my obſervation enables me to decide, I think there ſhould be but one opinion upon the ſubject. We are often obliged to allow venereal patients when uſing mercury to go abroad, and to manage their ordinary buſineſs, but I have never done ſo but with regret. Expoſure to the irregularities of the external atmoſphere always does harm in a courſe of mercury.

It is apt to produce diſtreſs at ſtomach, pains in the bowels, and purging. This neceſſarily impedes

the operation of the medicine, by which the cure is not only protracted but rendered more uncertain. I am, clearly of opinion therefore, that this kind of expoſure ſhould at all times be avoided. At the ſame time I do not think it neceſſary that patients under mercury ſhould be kept in a great degree of heat. On the contrary, much advantage is derived from their living in a large well aired apartment, and in a degree of heat that is moſt agreeable to their own feelings. Nay, except in the cold weather of winter and ſpring, there is no neceſſity for confinement to one apartment; and any unuſual quantity of cloathing, whether in bed or during the day, is altogether unneceſſary. In ſhort, much expoſure appears obviouſly to prove hurtful, while no advantage is derived from the patient being kept in an unuſual degree of heat.

I think it proper, however, to obſerve with reſpect to cloathing, that linen ſhould never be worn next the ſkin during the uſe of mercury; whether the patient ſweats much or not it keeps the ſurface of his body colder than it ought to be; and if he is liable to plentiful perſpiration he is even apt to be hurt by it. Flannel ſhould be worn during the cold of winter and ſpring, and cotton when the weather is more temperate.

VIII. *Of Profuſe Salivation and ſome other Effects of Mercury.*

We have already had occaſion to ſee that in the cure of Lues Venerea there is no advantage to be derived from any increaſe that may be made to any of the ſecretions. But we have alſo ſeen that the advanced ſtages of the diſeaſe cannot be with certainty cured without ſuch a quantity of mercury being thrown into the ſyſtem as very commonly excites an increaſed diſcharge of all the ſecretions, and particularly of the ſaliva. When this continues moderate no harm enſues from it, but occaſionally they come to ſuch a height as to produce much inconvenience and diſtreſs. Indeed the readineſs with which mercury in ſome caſes runs to the mouth is ſuch that it is with difficulty a

ſufficient quantity for curing the diſeaſe can be given; and it produces, I may obſerve, one of the moſt diſtreſsful circumſtances that we meet with in practice.

The moſt certain method of preventing ſevere ſalivation is the gradual exhibition of mercury in the manner we have already pointed out. Occaſionally we ſucceed in preventing it by guarding againſt external cold, by confinement to the houſe and the uſe of warm cloathing of flannel or cotton. But while in this manner we ſupport a gentle and equal flow of the matter of perſpiration, ſevere ſweating is to be avoided, which always proves hurtful, and even ſometimes, as I have thought, more ſo than profuſe ſalivation. But in ſome caſes, even with all the attention that can be given, the mouth becomes quickly ſore, and a gradual diſcharge of ſaliva takes place much ſooner than is expected.

Purgatives are the remedies moſt frequently employed for removing ſalivation: I have not found, however, that they prove uſeful, and when perſiſted in they never fail to do harm, for they weaken the patient, while they ſeldom have any effect in leſſening the ſalivary diſcharge.

Bliſters have alſo been adviſed. The ſenſe of ſuffocation, which the ſwelling of the ſalivary glands ſometimes gives, would appear to indicate the uſe of bliſters. We do not perceive, however, that they have much influence upon the diſcharge, while by the irritation which they excite they very commonly do harm.

As ſulphur when combined with mercury renders it ſo inert that it ſcarcely acts upon the human body, many have imagined that it ought to have ſome influence in leſſening or removing the ordinary effects of mercury upon the ſyſtem. We do not find in practice, however, that theſe views which theory ſuggeſted are in any degree realized. It has often been employed for leſſening the violence of ſalivation, but few inſtances have occurred of any advantage being derived from it.

To me it appears that this effect of mercury is entirely local, and to be cured therefore with moſt certainty by local remedies. It is obviouſly the conſequence of irritation produced by mercury upon the ſalivary glands: The dread, therefore, which ſome have entertained of applying

local remedies seems to have no good foundation; and accordingly I have found that they may be employed with freedom. As a wash for this purpose lime-water proves useful, but it requires to be diluted. A strong infusion of red-rose leaves, of galls, oak-bark, and other astringents, prove also serviceable; but the most effectual application I have ever employed is a strong solution of borax.* A little of it being kept in the mouth from time to time proves exceedingly pleasant and soothing, and at last has often an obvious effect upon the quantity of the discharge. It may prove in some degree useful as an astringent, but it seems to act chiefly as a sedative by lessening the irritable state of the salivary glands.

It is evidently in this manner that opium proves useful in removing salivation; for although some advantage is derived from applying it directly to the parts affected in the form of a gargle it proves always much more useful when given internally. A dose of laudanum, sufficient to allay the irritation and pain which always accompany a profuse salivation, and to procure sleep during the night, not only gives temporary relief but is the most powerful remedy we can employ for removing the discharge. When the uneasiness is severe the opiate should also be repeated in the morning.

Where salivation comes suddenly to a greater height than the quantity of mercury we have employed should give us cause to expect we are apt to be at a loss, and afraid of giving more left distressful consequences ensue from it. In such circumstances, however, I have often found that although the usual quantity of mercury was continued daily the salivation was not increased, and that in this manner it might be persisted in till the cure was completed. This will not indeed be always the case; but it succeeds so frequently, that in every instance a trial should be made of it, for a cure may thus be effected in a few weeks which otherwise might be protracted for several months.

It has also been remarked, if salivation excited in this manner be allowed to subside entirely, that the same, or even a greater quantity of mercury, may afterwards be exhibited without any risk of the discharge coming again to

* Vide Appendix, No. 29.

a ſimilar height. Of this I have met with ſeveral inſtances, ſo that the practice may always be adopted when it is found that a proper quantity of the medicine cannot be continued with ſafety from the firſt.

One of the moſt diſtreſsful occurrences which we meet with in this diſeaſe proceeds from a peculiarity inherent in ſome conſtitutions, by which even the ſmalleſt quantity of mercury that we employ is apt to ruſh with violence to the mouth. This is particularly apt to happen where the patient at the ſame time labours under the ſea ſcurvy. In this caſe our only remedy is the removal of the ſcorbutic diatheſis by a plentiful uſe of acid vegetables and other antiſcorbutics, but where it does not proceed from this cauſe all that we can do is to give thoſe preparations of mercury that are leaſt apt to affect the mouth, and to preſcribe them in the ſmalleſt doſes. In this view corroſive ſublimate in ſmall quantities is particularly indicated; and in ſuch conſtitutions I have ſometimes found that Plummer's pill, a combination of calomel and ſulphur, and which in common practice no great dependence can be placed upon, has proved completely ſucceſsful.*

It luckily happens, however, where ſalivation is thus eaſily excited that the ſymptoms of ſyphilis in general yield to a ſmall quantity of mercury. Some of the worſt ſymptoms of the diſeaſe will give way to a ſalivation induced by a very few grains of mercury. Even the uneaſineſs produced by nodes ſubſides at once on the ſalivation being fully excited. But it is proper to remark that this firſt effect of the mercury will not prove permanent if it be not followed out with farther quantities, given at ſuch intervals as the ſtate of the ſalivation will admit. I have repeatedly found, however, that this may be done with ſafety, even where a ſevere degree of ſalivation has previouſly taken place. In one caſe of this kind, where there were deep venereal ulcers on the ſhoulder and on the head, as well as a node upon one of the bones of the fore arm, a violent ſalivation was excited by the exhibition of five mercurial pills, each of which contained only one grain of mercury. This gave an entire check to the pain which accompanied

* Vide Appendix, No. 21.

the node, and to the progreſs of the ulcers, and although other five pills only were given the ſalivation was kept up for eight weeks, when the ſores healed and the cure was complete, no venereal ſymptoms having yet appeared, although ſeveral years have elapſed.

In the progreſs of a long continued ſalivation tooth-ach and pains in the jaws and gums are apt to occur, and they add much to the diſtreſs of the patient. There is one advantage that we derive from giving mercury in a gradual manner; by beginning with ſmall quantities and increaſing them ſlowly the glands of theſe parts do not ſwell ſo ſuddenly, nor is the pain which enſues ſo ſevere as when too large doſes are made uſe of at once. We alſo derive ſome advantage from keeping the parts moderately covered with thin flannel. There is no neceſſity for the head being ſo warmly covered as is commonly done, nor is it at all neceſſary where theſe pains do not take place; but when once they have occurred nothing proves more uſeful than moderate warmth. Indeed flannel ſeems here to be equally uſeful as it is in the ordinary form of rheumatiſm; from which, and from the reſemblance which theſe pains to which patients taking mercury are liable in their jaws and head bear to rheumatic affections, I conclude that they are of the ſame nature.

Before a patient enters upon a courſe of mercury, if there is cauſe to imagine that he will be long kept under it, and that a large quantity of the medicine will be neceſſary, we may ſave him a good deal of diſtreſs by inſpecting his mouth and removing any teeth that are either very looſe or much ſpoiled; for teeth in this ſtate never fail to give much pain when the full effect of the mercury upon the mouth has taken place. The points of teeth that are ragged ought alſo to be removed, as they are apt to produce painful and troubleſome ulcers on the contiguous parts as ſoon as they become much ſwelled.

Ulceration of the inſide of the cheeks and other parts of the mouth occurs alſo, and often in a very diſtreſsful manner from the mercury alone, where no teeth in this ſtate can be diſcovered. The moſt effectual method of preventing this is, to cauſe the patient, from the very firſt effect of mercury upon theſe parts, or even before this takes place,

to wash his mouth several times a-day, perhaps every two hours, with port wine and water, an infusion of red-rose leaves, or any other astringent. In this manner we strengthen the parts against the usual action of the medicine, and it also proves useful by preventing that foulness of the mouth which in every course of mercury is apt to take place. Figwort and other emollients are commonly employed for this purpose, but I have not found that they answer so well as astringents.

In speaking of the different preparations of mercury we had occasion to remark, that almost all of them, when given internally, are apt to injure the stomach and bowels. It is chiefly the bowels, however, which suffer from mercury, and they do so in some instances in a very alarming degree. The purging which takes place proves not only painful and debilitating, but often exceedingly obstinate. At first the discharge consists chiefly of fœces, but afterwards these are mixed with slime, and often with considerable quantities of blood. The patient is also apt to suffer from a very frequent tenesmus.

From the similarity of symptoms we should be apt to imagine that purgatives might be equally serviceable here as in common cases of dysentery and diarrhœa; but we do not find this to be the case. We derive some advantage, however, from sheathing the intestines with a plentiful use of the farinaceous vegetables, and animal jellies prepared with calves feet, and shavings of hartshorn. Milk boiled to the consistence of a jelly with wheaten flour, or flour of rice, proves likewise an useful remedy.

In preventing this effect of mercury upon the intestines we derive most advantage from the patient being kept in a moderate and equable heat, and from his skin being preserved in a perspirable state, and so remarkable is the influence of this, that the slightest check to the discharge by the skin seldom fails of inducing purging. The fact indeed is so generally admitted that I would not have taken this particular notice of it, if a contrary opinion had not lately been advanced, and from which much mischief might ensue, were the practice to be adopted which it tends to inculcate.*

* Mr. John Hunter, whose ingenuity and abilities are only to be equalled by his singular opinions, does not imagine that the operation of mercury can be af-

Camphor proves ſometimes uſeful in correcting this ſymptom. It may be given for this purpoſe to the extent of eight or ten grains, three times a-day. Some of the abſorbent earths, and kino, are occaſionally uſed with advantage; but opiates, particularly when thrown up by the rectum, are the remedies upon which we chiefly depend for removing the pain, and this is very commonly attended with a diminution of the diſcharge. When a clyſter of thin ſtarch and fifty or ſixty drops of laudanum can be retained it ſeldom fails to give immediate relief, but where the teneſmus is ſevere whatever is injected by the anus is very apt to be inſtantly returned. In this caſe opium conjoined with kino, in the form of pills, ſeems to be the beſt form of the remedy.

It is here proper to remark, that although purging and gripes are frequent conſequences of the internal uſe of mercury they are ſeldom obſerved during the longeſt mercurial courſe where unction only is employed. When the courſe is conducted in this manner looſe ſtools may occaſionally occur, but they may be generally traced to the effects of cold and dampneſs. I have ſeldom obſerved an inſtance of ſevere or obſtinate diarrhoe from the external application of mercury, where the commencement of the purging could not be traced to ſome other cauſe.

When none of the means employed for removing purging induced by this cauſe prove effectual, we are under the neceſſity of adviſing a temporary ſuſpenſion of the mercury, without which, indeed, all our remedies will frequently fail.

Profuſe ſweating, I have already noticed as an effect that ſometimes enſues from mercury, and it ought to be guarded againſt with much attention. Nothing tends more to induce debility and injure the conſtitution than a long continuance of this ſymptom.

The moſt effectual method of preventing ſweating is to avoid much warmth, ſo that patients are ſeldom

fected by cold, not even by the patient being allowed to walk "in froſt and ſnow." Mr. Hunter does not ſay that he has practiſed this method, and I cannot avoid obſerving that nothing ſhould have warranted the publication of ſuch an opinion but very ample experience of its being well founded. Vide Mr. Hunter's Treatiſe on the Venereal Diſeaſe, p. 349.

hurt with it who pay due attention to the heat of their apartments. It was formerly the practice to confine patients under mercury to ſmall apartments; to prevent as much as poſſible all kind of acceſs to the external air; and to have the bed placed by the ſide of a large fire. Theſe meaſures prove detrimental in different ways, and they ſeldom fail to excite a conſtant and profuſe perſpiration. The moſt effectual method of preventing this is, to keep the patient in an equal moderate temperature, in a large apartment, and even to admit of his going from one apartment to another, which, in moſt inſtances, may be done with ſafety. A nouriſhing diet, a moderate allowance of wine, the free uſe of Peruvian bark, and of the vitriolic acid, are the moſt effectual remedies againſt this effect of mercury. But nothing proves ſucceſsful where the apartment is kept too much heated.

In ſome caſes the kidneys are particularly acted upon by mercury; but the diſcharge of urine which it excites is ſeldom ſo great as to injure the patient. Were it ever to do ſo, the remedies commonly employed in diabetes would be adviſed, and of theſe the moſt effectual perhaps that we could give, would be ſuch as operate by promoting a diaphoreſis.

It is not an uncommon effect of mercury to excite an eruption upon the ſurface of the body. In ſome this appears as a miliary raſh, ſomewhat reſembling meaſles; while in others it is conſiderably elevated, and ſeems to be produced by a ſerous effuſion between the cutis and ſcarf ſkin. In ſome the eruption is partial, being confined to particular ſpots, while in others it prevails generally over the whole body.

This eruption or efflorescence is not attended with pain, but the heat and itchineſs which accompany it are in ſome inſtances ſo diſtreſsful that it keeps the patient at all times very uneaſy, and deprives him entirely of reſt.

The remedies which I have found to anſwer beſt are the internal uſe of opiates, conjoined with the application of flour, or ſtarch-powder to the parts affected. The ſkin is kept ſufficiently cool and eaſy

by one or other of these powders being from time to time freely applied to the eruption; and by a proper exhibition of opiates we secure rest during night. In some instances, however, we are obliged to avoid the use of opiates; for although they may answer the purpose of procuring sleep they tend evidently to increase the heat and itchiness of the eruption. We find, indeed, that in some constitutions opium excites an uneasy itchy sensation over the whole body, even where no irruption has previously taken place; and it is perhaps with such patients only that it cannot be employed in the treatment of this eruption.

The eruption to which I allude appears to arise entirely from the effect of the mercury upon the system; but it does not seem to depend on any particular preparation of the remedy. It takes place indiscriminately from all of them, and not more readily from unction than from these preparations that are used internally. But there is a kind of eruption of a local nature, produced entirely by the friction employed in the application of unction. This appears in the form of distinct pustules, which in some are accompanied with a good deal of uneasiness, while in others they produce no kind of distress. No remedy proves of any avail while the application of the ointment is continued, but the eruption may always be prevented by the precaution we have formerly given, of not applying the friction in daily succession to the same part.

IX. *Does Mercury ever fail in the Cure of Lues Venerea?*

This is a question of the highest importance, and therefore merits our attention. I am disposed from the result of my own experience to say, that mercury under proper management may be considered as a certain remedy for syphilis, when not combined with other diseases, or where it does not affect patients whose constitutions are so reduced and debilitated as

to prevent the quantity of the medicine that is neceſſary to deſtroy the virus from being employed. I know that ſome are of a different opinion; but I conclude that they are wrong, from my never having met with an inſtance of mercury having failed when it was properly given, but where ſome obvious reaſon, ſuch as I have mentioned, could be aſſigned for it.

Lues Venerea, as we have already had occaſion to ſee, is often combined with diſeaſes in which mercury commonly does harm. This is particularly the caſe in ſcurvy, and in ſome degree with ſcrophula. In the higher degrees of ſcurvy mercury cannot be given but with great danger; and even where it prevails in a ſlight manner only, mercury cannot be employed in ſuch quantities as are ſufficient for eradicating any of the more formidable ſymptoms of Lues Venerea. When the two diſeaſes therefore are conjoined we cannot expect that mercury will have much influence in the cure of any venereal ſymptoms that may take place; and I believe that we are often diſappointed in the treatment of the diſeaſe by the patient at the ſame time labouring under a certain degree of ſcurvy, which although not ſo obviouſly marked as to indicate the propriety of adviſing an antiſcorbutic regimen, may yet be ſufficient to prevent him from receiving the full advantage of a courſe of mercury.

I conclude this to be the caſe from the frequent inſtances of the failure of mercury in the cure of many of the ſymptoms of ſyphilis, in which it afterwards proves ſucceſsful when the conſtitution of the patient has been reſtored from a weak debilitated ſtate to ſtrength and firmneſs, and which we uſually accompliſh by a milk and vegetable diet, country air, and ſuch other articles of regimen as generally contribute to remove even the high degrees of ſcurvy.

Nay, I believe that a mercurial courſe when long protracted, is apt to induce a certain degree of that very ſtate of the ſyſtem which I now allude to, and which I conceive to be the cauſe of the remedy being often found to fail where in this manner it has been long continued. Every practitioner is acquainted

with this circumſtance, that a variety of venereal ſymptoms, and more eſpecially extenſive ulcers, will to a certain length do well under mercury, when after a great deal of the medicine has been exhibited they will begin to remain ſtationary, and make no progreſs whatever, although the mercury ſhould be given in larger quantities than at firſt. Nay, in ſome inſtances they become worſe. The diſcharge from the ulcers, inſtead of being mild and purulent, as for ſome time it may have been, will become thin, ſharp, and corroſive, and the ſores themſelves more extenſive. In this ſituation a farther continuance of mercury very commonly does harm, whilſt the moſt obvious advantages are derived from it after the conſtitution of the patient has been reſtored by the influence of a proper regimen. We even ſometimes find that a cure is accompliſhed by regimen alone, and that no more mercury is required, but this can only happen where a ſufficient quantity of the medicine has been previouſly given for the deſtroying the virus of the diſeaſe, and where the ulcers which remained were kept up by a ſtate of the ſyſtem, which mercury, inſtead of removing, ſeems evidently to promote.

In the commencement of a mercurial courſe, and for ſome time thereafter, it is a certain effect of mercury to excite inflammation, and to produce that ſtate of the ſyſtem which we conceive to be the very reverſe of what takes place in ſcurvy. The pulſe becomes full and frequent, and the blood is firm and ſizy; but all who have paid attention to the ſubject will have perceived that the contrary happens where mercury has been long continued. The patient, however full he may have been, is for the moſt part much emaciated: his pulſe is feeble, and any febrile ſymptoms to which he may be liable are of the low or putrid kind. The particular ſtate of the blood in this ſituation we have few opportunities of obſerving, as for the moſt part the diſcharge even of a ſmall quantity would in ſuch circumſtances prove hurtful, and therefore is not adviſed: We have reaſon, however, to conclude, that it is the reverſe of what takes place from inflammation, as the moſt

effectual remedies we employ here, are a generous diet, wine, and bark.

This opinion of the effects of mercury upon the ſyſtem receives ſome confirmation, I may remark, from the putreſcency which it evidently excites in the mouth; and from the peculiar tendency both of mercury and ſcurvy to excite a tender ſtate of the gums, and a very fœtid ſtate of the breath, we have reaſon to ſuppoſe that the effects of both are in ſome degree the ſame.

This might be farther elucidated by various arguments which the extent of this publication will not admit. Enough, however, has been ſaid for the purpoſe of explaining the chief part of the treatment I have ventured to propoſe; particularly that which relates to diet and other articles of regimen during a courſe of mercury.

In ſpeaking of ſcrophula as an impediment to the action of mercury in the cure of Lues Venerea I do not mean to ſay that the diſeaſe cannot be cured in ſcrophulous conſtitutions. We daily meet with the contrary of this: But we alſo find, when the ſame ſore partakes both of ſcrophula and Lues Venerea, that we do not derive the ſame advantages from mercury as in ſores purely venereal. In ſuch circumſtances, after as much mercury has been given as is productive of any beneficial effect, and of which we judge by the ſores or other ſymptoms making no progreſs towards farther amendment, our beſt chance of effecting a cure is to omit the mercury, and not have recourſe to it again till by the uſe of bark, cold bathing, cicuta, and other remedies employed for ſcrophula, the diſpoſition is corrected or removed by which the operation of the mercury upon the ſyphilitic ſymptoms was rendered ineffectual.

But the moſt frequent cauſe of our failure with mercury in the cure of this diſeaſe is that which I have already had occaſion to inſiſt upon, our giving it in ſuch ſmall quantities as are not ſufficient in the more advanced ſtages of the diſeaſe for eradicating the virus; by which, although the ſymptoms may all be rendered much milder, or even apparently removed, they either do not entirely diſappear, or if they do, are afterwards very apt to recur. This, however, is not the fault of the remedy, but of the method of giving it, and of which all who adopt the practice of

giving it in ſufficient quantities will be convinced. Since I went into this practice, beſide having had many inſtances of the medicine proving effectual when exhibited in theſe quantities, where it had previouſly failed, I have not as yet, and ſeveral years have elapſed, had a ſingle inſtance of its failure, except in ſuch combinations as I have mentioned, or where the conſtitution was in ſuch a ſtate of debility that a ſufficient quantity of mercury could not be employed. But even of theſe very few caſes have occurred. I have no heſitation, therefore, in ſaying that mercury under proper management may, with very few limitations, be conſidered as a certain remedy for ſyphilis.

§ 3. *Of Guiacum.*

Guiacum has long been employed as a remedy in Lues Venerea. It was uſed indeed very generally over Europe ſoon after this diſeaſe came to attract the attention of practitioners. Being for ſome time the only remedy upon which any dependence could be placed, it was at firſt greatly extolled by all who wrote upon it; and from the teſtimony given of it by authors of the firſt reputation, not only of theſe times, but of later periods, there was no reaſon to doubt of its being poſſeſſed of the power of mitigating, and perhaps of curing ſome of the ſymptoms of ſyphilis. The powers of mercury, however, were found to be ſo preeminent that guiacum came at laſt to be ſeldom uſed by itſelf, but by many it was, and ſtill is continued as an aſſiſtent to mercury.

Being ſeldom given by itſelf many came at laſt to doubt whether any advantage was obtained from it or not; and ſome went ſo far as to ſay that it poſſeſſed no power whatever over any ſymptom of this diſeaſe. This is one, which among other effects, might be mentioned that reſult from habit and prejudice. I own too, that from the ſame cauſe I was at one period of this opinion, till I found by experiment that guiacum in different forms could even by itſelf remove many of the ſymptoms of ſyphilis. Venereal ulcers and blotches upon the ſkin are the ſymptoms in the removal of which its effects are moſt conſpicuous. In three caſes of ulcers, and one of blotches upon the breaſt

and arms, all clearly marked, and in which mercury had never been employed, the ſymptoms were completely removed by the internal uſe of guiacum alone. In the patient with blotches, however, the diſeaſe returned in the ſpace of a month, but not in the ſame form. In one of the others the ulcers appeared again at the end of ſix weeks. In a third they continued well after three months had elapſed, but what became of this patient afterwards, and of the fourth, I do not know. The two firſt were afterwards cured with mercury.

Although the reſult of theſe trials did not induce me ever to truſt to guiacum alone, they gave ſufficient ground to conſider it as a remedy from which ſome advantage may be occaſionally derived when conjoined with mercury; accordingly I have been led to continue, or rather to recommence the uſe of this remedy in many caſes of ſyphilis, for at one period, from the cauſe I have mentioned, I had laid it entirely aſide.

I believe, indeed, that I would have been induced to place more dependence upon it, or at leaſt to have proſecuted my experiments with regard to it farther than what I had done, if I had not been prevented by the reſult of ſome trials which Mr. Hunter alſo had made with it, and which he publiſhed about the ſame period. By theſe it evidently appeared that guiacum has a conſiderable influence upon the venereal virus. I never made trial of it as a local application; but Mr. Hunter found that in this manner it cured venereal ulcers, firſt in one part of the body, and afterwards in others, where ſarſaparilla employed in a ſimilar manner had failed. He found too that very numerous venereal ulcers were removed by the internal uſe of it, but after both trials the diſeaſe ſoon returned. Mr. Hunter's experiments were made with the gum, mine with an extract and ſtrong decoction of the wood. The extract ſeemed to be equally effectual with the decoction, but as it has a ſtrong tendency to affect the bowels I ſoon left it off, and employed the latter only. In theſe caſes to which I allude, as well as in ſome others, a very ſtrong decoction was employed, three ounces of the wood to an Engliſh quart of water, that is, this quantity was boiled in two quarts of water into one, and this was taken in the

courſe of a day, either by itſelf or mixed with milk; but as it is apt to purge when of this ſtrength, and is likewiſe diſagreeably acrid, and as I never now depend upon it alone for the cure, I ſeldom put more than an ounce to this quantity of decoction.*

That mercury might not cure every ſymptom of ſyphilis equally well whether guiacum was employed along with it or not I will not poſitively ſay; but I am diſpoſed to think, and not without much attention to the ſubject, that the cure commonly goes on more eaſily when the two are conjoined than when mercury is given to any great extent by itſelf. I am therefore in the frequent habit of uſing guiacum, particularly where the diſeaſe is of long duration and has appeared upon the ſurface, either in the form of ulcers or eruption. It has alſo been much recommended for its efficacy in nodes, and for the removal of thoſe pains reſembling rheumatiſm, which frequently proceed from ſyphilis. I have not found, however, that it proves ſo uſeful in nodes as in other ſymptoms of the diſeaſe; and where pains only take place we can never with ſuch certainty determine from what cauſe they proceed, as they are undoubtedly one of the moſt equivocal ſymptoms of ſyphilis, and there is no cauſe to doubt of guiacum being a very uſeful remedy in caſes merely rheumatic.

I have in different inſtances found a ſtrong decoction of guiacum prove particularly uſeful in the cure of thoſe extenſive ulcers which ſometimes ſucceed to buboes. In ſome the guiacum anſwers by itſelf, but it proves more frequently ſucceſsful, as we ſhall hereafter have occaſion to mention, when conjoined with mezereon and ſarſaparilla.

§ 4. *Of Sarſaparilla.*

Sarſaparilla has been long employed in the cure of Lues Venerea, and from the reſult of ſome trials which I made with it I am diſpoſed to think that ſome advantage may be derived from it. The trials which I have made with it along with mercury have been numerous, but it is not upon theſe that any judgment can be formed of its real efficacy.

* Vide Appendix, No. 22.

Neither have I given it often where mercury had not been previouſly uſed; but I have had many opportunities of uſing it in caſes where mercury had not proved altogether ſucceſsful, whether from being given in too ſmall quantities, or from being exhibited without that attention to regimen which it requires, and in a great proportion of theſe it has been productive of evident good effects. I have found it particularly uſeful in thoſe ſymptoms which chiefly affect the ſkin, ſuch as blotches and the remains of old venereal ulcers. When mercury from either of the cauſes which I have mentioned has failed of completing the cure I have in various inſtances known it accompliſhed by ſarſaparilla, where otherwiſe there was much reaſon to think that mercury in a larger quantity, or given in a different manner, would have been neceſſary.

I have given ſarſaparilla in powder, in extract, and in decoction, but the latter has always appeared to anſwer beſt. Not unfrequently I conjoin it with guiacum, and it anſwers the purpoſe of blunting the acrimony of the latter.*

Sarſaparilla and guiacum have both a tendency to promote perſpiration. Beſides any power which they may poſſeſs of acting directly upon the venereal virus, they ſeem alſo to prove ſerviceable where mercury goes too readily to the mouth, in diverting it from that outlet.*

§ 5. *Of Mezereon.*

The root of this plant has long been employed for the removal of ſchirrous tumours by whatever cauſe they may be produced, and many have thought that it has proved particularly uſeful in venereal nodes, as well as in ſome other ſymptoms of this diſeaſe. As I have not made much uſe of it where mercury was not either employed along with it or before it was given, I cannot from my own obſervation determine whether it is poſſeſſed of the power of curing ſyphilis by itſelf or not; but from much experience of the effects of it when conjoined with mercury, I can ſay deciſively that in this manner it often proves uſeful. I have never known any advantage that was ſuffici-

* Vide Appendix, No. 23.

ently clear and obvious derived from it in nodes, but it certainly tends to heal thoſe ulcers which ſometimes remain obſtinate after the quantity of mercury is given that we judge to be neceſſary.

I have already had occaſion to mention that ſpreading ulcers of this kind are particularly apt to ſucceed to buboes, and that they often reſiſt all the remedies that we employ for them. As this ſometimes happens after a very full quantity of mercury has been given, and as the ſores often heal at laſt from the effects of a change of regimen alone, I conclude that they are not kept up by any remains of Lues Venerea; and as it is in this ſtate of the diſeaſe that I have chiefly obſerved any advantage to accrue from mezereon, I conclude that it acts particularly by correcting that ſtate of the ſyſtem which long continued uſe of mercury is apt to induce, and which by experience we find to be very inimical to the cure of all ſuch ſores as the patient at the time may labour under.

It ſeems to be in this manner that Kennedy's decoction, and of which mezereon appears to form a conſiderable part, proves particularly uſeful. There is no reaſon to ſuppoſe that any quantity of mercury is contained in that decoction, and yet there is no cauſe to doubt of ſores of this deſcription having been often ſoon healed by it, which had previouſly reſiſted every attempt that was made to cure them. Of this I could mention ſeveral hiſtories which have fallen within my own knowledge, but they are too long to admit of inſertion in this place. This decoction, I may remark, appears to be nearly, or perhaps entirely the ſame with the Liſbon decoction, for which a form is given in the Appendix*.

In uſing this root it is proper to obſerve, that the ligneous parts of it are altogether inert. The bark of the root appears to be the only active part of it. An Engliſh quart, containing a drachm and a half of the bark, is a ſufficient quantity to be taken in the courſe of a day, and even this, when the root is in perfection,

* Vide Vol. I. Nos. 46 and 47.

renders the decoction ſo acrid that it is apt to affect the throat. With a view to leſſen this acrimony we conjoin it with gum arabic, liquorice, althea, and often with ſarſaparilla*.

§ 6. *Of Opium.*

Opium had long been employed for the relief of that kind of irritation which ſome of the ſymptoms of Lues Venerea are apt to excite, but it was not till within theſe fourteen years that it was ſuppoſed to poſſeſs any power of deſtroying the venereal virus, or of curing this diſeaſe. It was firſt employed with this view in the Britiſh hoſpitals in America; and Doctor Michaelis, phyſician to the Heſſian troops was, I believe, the firſt who put it to the teſt of experiment.

Since that period it has been uſed as an antiſyphilitic medicine by various practitioners in almoſt every part of Europe; and it has had the fate of almoſt every new remedy, or of every remedy employed with new motives. Some have ſpoken of it in the higheſt terms of panegyric, while others do not admit that it is capable of removing even the mildeſt ſymptom of the diſeaſe. In matters of doubt all that authors ought to attempt is to ſtate clearly what they know to be matter of fact, as it is from the reſult of repeated trials properly authenticated that an adequate judgment on all ſuch points is alone to be formed. As it appeared to be a matter of the firſt importance to have a new remedy for the cure of Lues Venerea, and which was reported to act with much more eaſe and certainty than mercury, I was one among many who gave it a very full trial. It was uſed in a variety of caſes and in different ſtages of the diſeaſe; but in no inſtance did it accompliſh a cure where there was cauſe to ſuppoſe that the virus was not previouſly deſtroyed by mercury. Sores originally produced by this virus, and kept up, as is ſometimes the caſe, by irritation alone, and long after the venereal taint is deſtroyed, are more effectually cured by opium than any

* Vide Vol. II. No. 24.

other remedy. Sores which from this cauſe have remained obſtinate for a great length of time, are, by the uſe of opium, often brought to a healing ſtate; and when the conſtitution is not otherwiſe diſeaſed, they are, for the moſt part, ſoon cicatriſed. It is proper, however, to diſtinguiſh between theſe ſores and ſuch as are venereal. Sores in this ſtate are not to be conſidered as venereal. The venereal virus, it is true, has acted as the exciting cauſe, but this being deſtroyed by mercury, they no longer depend upon this, and in ſuch circumſtances are to be treated in the ſame manner with ſores of a ſimilar nature proceeding from any other cauſe. In whatever way ſores may have taken place, if much irritation prevails, opium is perhaps the beſt remedy we can employ, but I have not found that it proves more effectual in ſores that are the conſequences of Lues Venerea than in ſuch as are produced by any other cauſe, provided the degree of pain and irritation with which they are accompanied be the ſame.

I ſuſpect much, therefore, that this diſtinction has not met with ſufficient attention by many who conſider opium as a remedy in the cure of ſyphilis. By acting as a very effectual remedy in the cure of many ſores in which mercury had failed, they have been induced to attribute powers to opium, which I have much reaſon to think it does not poſſeſs, for I have never known it prove effectual where mercury had not previouſly been given.

Antiſyphilitic powers being once attributed to opium it was readily imagined that in proportion to the quantity exhibited it would prove more or leſs effectual. It was accordingly given in large doſes, and theſe were more frequently repeated than had been uſual in former practice. Few, I believe, made more complete trials of it, or have puſhed it farther than I have in various inſtances done: Beginning with two grains at bed-time, one in the morning, and another at mid-day, and adding a grain to each doſe every third or fourth day, patients in this manner I have found could bear very conſiderable quantities in the courſe of a ſhort time. One of my patients who could not at firſt bear more than a grain at once, in the courſe of five weeks took three doſes of fifteen grains each, daily. I did not find, however, that any advantage was derived from

giving it so largely, while it frequently did much harm. It was apt to excite sickness, head-ach, and giddiness, a total loss of appetite, in some an obstinate costiveness, and what was more surprising, it acted with many as a smart purgative. I never observed this effect, however, till the dose came to the extent of ten or twelve grains; but when this symptom did take place from it, no astringent medicine seemed to have any effect in removing it, and it was only relieved by emetics and purgatives.

I must indeed admit that opium was taken by many, even in large doses, without any inconvenience or distress; but being soon sensible that it had no effect in destroying the venereal virus; that it proved in no other way useful than by lessening or removing irritation; and that this resulted with equal certainty from moderate doses, I have of late desisted from giving it in larger quantities than two or three grains in the course of a day.

Opium conjoined with an emetic has long been known as a very useful remedy in rheumatism; and I have found it prove particularly useful in those pains resembling rheumatism which occur in the venereal disease. But the relief which it procures is only temporary if mercury be not employed along with it. For this purpose laudanum may be given along with tincture of antimony, or opium may be given with ipecacuan, in the form of Dover's powder.*

In some cases opium proves useful as an external application, whether employed as a wash for painful phagadenic ulcers, or in a solid form as an ointment; but it does not appear, even in this manner, to act in any other way than as an anodyne.

* Vide Appendix, No. 25.

SECT. V.

Of the Cure of Lues Venerea.

§ 1. *Of the Cure of Chancres.*

A DESCRIPTION of chancre is given in Section II. of this Chapter, page 8. The firſt queſtion to be determined in the treatment of chancre is, whether the cure ſhould be truſted entirely to the internal exhibition of mercury; to the uſe of local applications; or to both of theſe combined.

A conſiderable time ago I had occaſion to mention my opinion on this ſubject, and hitherto I have ſeen no good cauſe for deſerting it.* My opinion at that time was, as it ſtill is, that chancres ſhould be healed as ſpeedily as poſſible, and that this may be done with ſafety by combining the advantages of local remedies with the internal uſe of mercury.

Many practitioners think that chancres ought not to be healed but by the internal uſe of mercury alone, and they give as reaſons for this, that when external applications are employed we can never be certain whether the conſtitution is rendered ſafe or not, while we can ſcarcely be deceived, they imagine, when chancres heal ſolely from the uſe of mercury. To this practice, however, there are different objections. The internal exhibition of mercury alone will not always cure chancres. I have known a perſon kept under the complete effect of mercury for many weeks, and the chancres for which it was preſcribed remain nearly in the ſame ſtate as at firſt. Nay, in different inſtances, where this practice was purſued, and in which the cure was truſted to mercury alone, although the remedy was continued in all of them for ſix or ſeven weeks, and under the beſt management, as the chancres did not heal the mercury was laid aſide on the ſuppoſition of the conſtitu-

* Vide Treatiſe on the Theory and Management of Ulcers.

tion being rendered safe; but although in all of them the sores were soon cured by the application of caustic, red precipitate, or some other escharrotic, in several, symptoms of pox appeared in the course of a few weeks; in some with ulcers in the throat, and in others with blotches upon the skin. From which I conclude that we cannot depend upon the internal use of mercury alone for the cure of chancres; nor have I observed that it acts with certainty, unless the sores are kept up by the virus having entered the constitution.

But the most important objection to the practice is, that being much more tedious in accomplishing a cure, it creates a greater risk of the virus entering the system than when the sores are more speedily healed by the use of external applications. The practice of healing chancres by the internal use of mercury only, originated from an opinion that venereal sores of every description proceeded from the constitution being infected, and were this the case, there might be cause to consider it as well founded; but now that we know that chancres at first are always local, and that they are the source of whatever matter enters the system, it is obvious that the more speedily they can with propriety be healed, the less will be the risk of the constitution being injured.

Chancres might frequently be cured by the use of external applications alone, and as we know from experience that the matter is not always absorbed the cure would in a few instances prove permanent; but as we have no means of distinguishing when this is the case, while there is reason to think that in most instances absorption takes place, we ought in no case to trust to it. In order to avoid the inconveniencies of a course of mercury, it has been fashionable of late to trust the cure of recent chancres to local remedies, but I know from various instances in which I have been consulted, that the practice is exceedingly dangerous. The chancres may be easily healed; but where mercury is not employed the disease in a great proportion of cases soon shews itself in the system.

The most certain, as well as the speediest cure of chancres is to be obtained from a due attention to external applications conjoined with a well regulated

courſe of mercury. By the former we are frequently enabled to complete the cure in a few days, which otherwiſe would require a great length of time, and by the latter the conſtitution is rendered perfectly ſecure.

Chancres in an incipient ſtate are moſt effectually cured by the application of cauſtic or eſcharrotics. If the diſeaſed parts are completely deſtroyed with cauſtic they ſoon become clean, and heal as quickly as ſores proceeding from any other cauſe and of the ſame magnitude uſually do. This practice is now very generally adopted, and the effect of it is ſo remarkable that it has never probably been laid aſide by any who have given it a fair trial. None, I imagine, have purſued it more fully than I have done; but I find it neceſſary to remark, that in the uſual way of conducting this practice it is liable to one very important objection: the chancres to which it is applied, if they are not of long duration, very commonly heal quickly; but in a great proportion of caſes the cure of the ſores is ſucceeded by buboes in the contiguous glands. For a conſiderable time I was induced to ſuppoſe that the ſwellings of the glands which thus took place after the cure of chancres were more the effect of accident than of the method of treatment, and that they would have occurred under whatever management the ſores might have been. The frequency, however, of their appearance made me at laſt ſuſpect that I was miſtaken, and farther obſervation made it obvious that this was the caſe.

As experiment alone could determine the queſtion, I was reſolved to employ this teſt. Of the firſt twenty patients who occurred with incipient chancres, in ten they were deſtroyed by an immediate and effectual application of lunar cauſtic, the remedy being employed according to my uſual cuſtom at that time, inſtantly on my being called. Of the other ten, five were dreſſed with blue mercurial ointment, and five with common wax ointment. The ſores to which cauſtic were applied healed much ſooner than the others, and next to theſe the ſores that were dreſſed

with mercurial ointment. But to the ten patients to whom caſtic was applied no leſs than eight had buboes, while only one bubo occurred in all the others, and it happened in one of the patients whoſe chancres had been dreſſed with mercury. I thought alſo that buboes appeared to be leſs frequent from the application of caufic where mercury had been previouſly given. This fell within my obſervation from time to time with patients who had taken mercury either of their own accord or by the advice of others, and appearing to be of importance I was reſolved to bring it likewiſe to the teſt of experiment, and the reſult was as follows: Of forty-eight patients with chancres in an incipient ſtate, and exactly as they occurred in practice, one half was treated in the manner I have mentioned, by deſtroying the chancres with cauſtic, immediately on my being deſired to ſee them, while all the others were put under mercury for eight or ten days before the application of cauſtic. In every other circumſtance the method of treatment was the ſame. The difference, however, ſurpriſed me exceedingly. Of the twenty four treated with the immediate application of cauſtic twenty were ſeized with buboes, while only three buboes occurred in an equal number to whom mercury had been previouſly adminiſtered.

Theſe buboes did not indeed all terminate in ſuppuration, nor did many of them arrive at any conſiderable ſize. Being cloſely watched, mercury was immediately applied for the purpoſe of diſcuſſing them, and for the moſt part it proved ſucceſsful; but there was no cauſe to doubt of their being venereal from their being equally difficult to manage, and from thoſe which ended in ſuppuration being equally difficult to cure with buboes which occur in the ordinary courſe of buſineſs. At firſt I was induced to hope that ſwellings produced in this manner were not venereal, but merely the effect of irritation excited by the cauſtic, but it ſoon became obvious that this was not the caſe, and that cauſtic does not deſtroy the venereal virus ſo completely as is commonly imagined, while, by the irritation which it always in ſome degree excites, it

tends often to produce buboes, which otherwiſe never would take place. This affords an additional proof to what has already been mentioned of the effect of irritation in exciting the action of the abſorbents; and the effect of mercury in this caſe, by preventing the formation of buboes, tends farther to ſupport the opinion of this medicine acting as an antidote to the ſyphilitic virus.

In moſt inſtances buboes produced in this manner begin to form in the courſe of a day or two after cauſtic has been applied; in ſome caſes even ſooner. But I have known them take place where the glands had remained ſound for a good many days after the chancres were completely cicatriſed, and where there was no reaſon therefore to ſuſpect that any exciting cauſe of buboes could remain. In theſe inſtances I conclude that ſuch a ſmall portion of the virus had been lodged in the lymphatics forming the gland, as required this length of time to excite that degree of irritation that is neceſſary for the production of bubo.

The ſame effect appears to reſult from whatever cauſtic is employed; at leaſt this has been the caſe with ſuch trials as I have made with lunar cauſtic, red precipitate, blue vitriol, and corroſive ſublimate; and as the cauſtic is more eaſily applied, while it commonly acts with more certainty, and perhaps with leſs pain than any of the others, I commonly give it the preference. Where cauſtic is to be employed, my practice now is to put my patient previouſly under mercury for the ſpace of ſix, eight, or ten days, till there is full evidence of the medicine having entered the ſyſtem. At this time cauſtic is applied over the whole ſurface of the chancre, however extenſive it may be, in ſuch a manner as to deſtroy all the diſeaſed parts, and the application is renewed as often as the ſores become foul or ſloughy. In ſome it is not neceſſary to uſe it above once or twice, while in others it muſt be repeated in every ſecond or third day, during a great part of the cure. Even where the ſores have become clean cauſtic often proves uſeful, particularly when they are ſtationary, and make

no progreſs towards a cure; in which caſe we may commonly make them cicatriſe more ſpeedily by the reiterated application of cauſtic than by any other remedy.

When chancres are brought into a clean healing ſtate a cure will for the moſt part be obtained by continuing the uſe of mercury for a ſufficient length of time, and by dreſſing with dry lint, or any ſimple ointment; but that fixed or ſtationary ſtate to which I allude, and in which they often remain where cauſtic is not frequently applied, is very effectually prevented by dreſſing with precipitate or calomel ointment; and in ſome caſes I have employed for the ſame purpoſe an ointment prepared with verdigris.*

In all caſes of chancres the parts ought to be kept particularly clean, and the beſt ordinary waſh for this purpoſe is a weak ſolution of corroſive ſublimate, in the proportion of one grain to ſeven or eight ounces of water. Where the ſores remain foul notwithſtanding the application of cauſtic, but which does not often happen where a ſufficient quantity of mercury is given along with it, it becomes neceſſary to employ a ſolution with a greater proportion of ſublimate. In this caſe one, or even two grains, may be added to an ounce of water; but this being too ſtrong for applying to the contiguous parts, care muſt be taken to confine it as much as poſſible to thoſe that are diſeaſed. In this foul or ſloughy ſtate of chancres, among the variety of dreſſings which we are occaſionally obliged to employ, the blue ointment prepared with equal parts of mercury and hogs-lard ſometimes anſwers well, as it does indeed in almoſt every ſtate of chancre in which it is proper that mercury ſhould be uſed. For the purpoſe too of removing this foul appearance which chancres are very apt to aſſume, and under which they never heal, red precipitate finely levigated is often employed in powder, and frequently with advantage. Calomel applied in this manner alſo proves uſeful; and it is chiefly in this ſtate of chancres that I have perceived moſt advantage to be derived from mercurial

* Formulæ of theſe ointments are given in the Appendix, Nos. 26, 27, and 28.

fumigations. In all ſlight caſes of chancres a free application of cauſtic very commonly proves ſucceſsful; but where the ſores are deep, extenſive, and very ſloughy, together with the uſe of cauſtic we are obliged to employ one or other of the articles which I have mentioned; and when precipitate, calomel, and even verdigris have failed, I have in various inſtances found that the parts have been rendered clean, and brought into a healing ſtate, by fumigating once or twice with cinnabar.

There are two ſtates, however, of chancre which do not admit of this mode of treatment, viz. where the parts affected are either much inflamed, or ſhow ſome tendency to mortification. In all other ſituations, whether the ſores be upon the glans, prepuce, or frenum, or even within the mouth of the urethra, cauſtic may be applied with freedom. It may be proper here to remark, that when a chancre is ſeated upon the frenum, or beneath it, if it is not altogether ſuperficial, the frenum itſelf ſhould be cut acroſs. It is eaſily done, no inconveniency is experienced from it, and it tends always to forward the cure.

When the parts upon which chancres are ſeated become much inflamed, ſuch remedies ſhould be employed as prove moſt effectual in removing inflammation. When the patient is plethoric, blood-letting in ſome inſtances is neceſſary, together with cooling laxatives, and a low diet.

The parts ſhould be dreſſed with any ſimple ointment, ſuch as the common ſaturnine ointment and wax liniment mentioned in the Appendix.* In ſuch circumſtances too ſaturnine poultices prove ſometimes uſeful; but nothing ever gives more relief than the internal uſe of opiates. By allaying irritation they frequently tend more effectually than any other remedy to leſſen or remove the inflammation.

In ſome caſes, however, notwithſtanding all our attention, this inflammatory ſtate of chancres terminates in gangrene, while in others gangrene takes place where no great degree of inflammation had been previouſly obſerved. In theſe oppoſite circumſtances the remedies to be employed ought evidently to be different. Where much in-

* Vide Nos. 29 and 30.

flammation ſtill prevails, blood-letting with other parts of an anti-phlogiſtic courſe ought to be puſhed as far as the ſtrength and age of the patient can with ſafety admit, while a plentiful uſe of bark is perhaps the beſt remedy where little or no inflammation occurs.

For the removal of inflammation, beſides general blood-letting, I have occaſionally ventured upon the application of leeches to the diſeaſed parts, and commonly with much advantage. The bites of leeches may in ſome inſtances give riſe to venereal ulcers, which otherwiſe would not have taken place, but little or no diſadvantage enſues from this, as they heal by the uſe of the mercury that we muſt neceſſarily employ for the cure of the diſeaſe, while nothing proves ſo effectual as local blood-letting, for carrying off that great degree of inflammatory tenſion which in caſes of this deſcription we ſometimes meet with.

Whether inflammation takes place or not, gangrene, when it ariſes from chancres, proceeds with more rapidity than it uſually does from any other cauſe. I have known a conſiderable part of the glans deſtroyed by it in the courſe of a day. For the moſt part, if not immediately checked, either by general or local blood-letting, or by a liberal uſe of bark, according to the nature of the caſe, it proceeds without our being able to put a ſtop to it till it comes to the urethra. In different inſtances I have known the urethra laid entirely bare for a conſiderable length on the mortified parts being removed; and where it begins upon the preputium, it proceeds in ſome caſes not only through the looſe ſkin and cellular ſubſtance of the penis, but even into the corpora cavernoſa.

The moſt diſtreſsful ſymptom which takes place from the mortification of theſe parts is the vent which it ſometimes gives to the urine by penetrating the ſubſtance of the urethra. In ſome inſtances one opening is formed; in others we meet with two, three, or more. Beſides the inconveniency and diſtreſs which this always occaſions it adds conſiderably to the hazard of the patient, for the urine in this manner finds acceſs to the ſurrounding cellular ſub-

ſtance, where it not only gives much additional pain, but the irritation which it excites ſeems to be of a nature particularly apt to create a diſpoſition to gangrene, ſo that whenever it takes place the mortification extends more rapidly than it did before, nor has bark and the other remedies uſually given much influence in putting a ſtop to it. We derive moſt advantage from opium. Whether opium acts here as an antiſeptic may be difficult to aſcertain: I rather ſuppoſe that it proves chiefly uſeful by leſſening or removing the irritation produced by the urine, for I have not perceived that its beneficial effects are in proportion to the quantity that is given. Small doſes, when they procure eaſe, ſeem to prove equally uſeful with the largeſt, which they would not probably do if they acted in any other manner. While by means of opiates we endeavour to leſſen the pain, much care ſhould be taken to prevent the urine from finding acceſs to the contiguous parts. Where it happens to lodge, the ſac which receives it ſhould be laid freely open, and the parts bathed with a decoction of bark, an infuſion of roſe leaves, or ſome other antiſeptic after every time the patient voids urine.

I have taken the more particular notice of this effect of urine upon parts in this ſituation as I do not find that it has been mentioned by others, and as various caſes have fallen under my care in which the moſt diſtreſsful conſequences enſued from it.

Chancres are particularly apt to become gangrenous when combined with paraphymoſis, but they do ſo occaſionally where no degree of this ſymptom has ever occurred.

The moſt alarming ſymptom of this ſtate of chancre is the hæmorrhagy which occurs when the mortification reaches the large arteries of the penis. No advantage is derived from tying theſe arteries with ligatures till the gangrene is completely ſtopped; ſo that in this ſituation we are obliged to truſt to the uncertain effects of aſtringent applications conjoined with moderate preſſure. Preſſure in this caſe is moſt effectually applied by means of a fillet of linen or cotton, paſſed round the penis, after a leaden or ſilver tube has been inſerted into the urethra.

The point of moſt importance in this ſtate of the diſorder is to determine the propriety of giving mercury, or delaying the uſe of it till the mortification is over. It is the common practice to continue the mercury that had previouſly been given for the chancres, and many even judge it neceſſary to give it in greater quantities. In every inſtance, however, where I have known this done, it has evidently proved hurtful; and having found from various trials that the mercury may with ſafety be laid aſide during the progreſs of the mortification, I now never employ it till all the mortified parts are removed. The fear of the diſeaſe gaining ground from this, and an opinion of the mortification being of a venereal nature, and that mercury is therefore neceſſary to ſtop it, is the cauſe of its being in general perſiſted in; but the progreſs of mortification is ſo rapid, when compared with the uſual ſymptoms of ſyphilis, and it is in every circumſtance ſo different in appearance from theſe, that I do not conceive it to be venereal. It is indeed evidently induced by this diſeaſe; but in this reſpect the ſyphilitic virus ſeems to act in no other manner than as the occaſional cauſe; and chancres being at firſt always local, I believe, that in moſt inſtances the ſore which remains after the mortification is gone is not venereal, and that it would heal whether mercury ſhould be given or not, in the ſame manner as would happen with a great proportion of chancres where cauſtic has been freely applied on their firſt appearance. But as we cannot in either caſe know with certainty whether the virus has entered the ſyſtem or not, the ſafety of our patient requires in both inſtances that mercury ſhould be given in ſuch quantities as may be neceſſary to effect this purpoſe. While mortification continues to advance it ſhould be treated in the ſame manner with gangrene from any other cauſe, and without any regard to the venereal diſeaſe: but as ſoon as the mortified parts are removed, the caſe ſhould be conſidered as entirely venereal; a courſe of mercury ſhould be adviſed and continued from a fortnight to three weeks or a month, according to the virulence and obſtinacy of the ſymptoms after the ſores are cicatriſed.

I have ſeldom, however, found it neceſſary to diſcontinue mercury during the inflammatory ſtate of chancres.

Even where inflammation runs high mercury may be safely given. By lessening the venereal irritation, it tends for the most part to abate, and even to remove the inflammation, so that I commonly prescribe it immediately, and persist in the moderate use of it during the whole continuance of this symptom.

After the inflammation produced by chancres is gone they fall to be treated in the same manner as if this symptom had not taken place. When they are clean, and with a surface disposed to granulate and heal, any common ointment will answer for dressing them, but when foul or sloughy the application of caustic, calomel, precipitate, and verdigris are equally proper as if the inflammation had not happened. Verdigris may not only be applied to chancres in powder, and in the form of an ointment, but in solution; and it equally tends to remove that sloughy foulness to which I allude, and disposes the sores to heal when they become stationary. It may be used in various proportions, from two grains to a scruple in the ounce of water.

In this clean state of chancres, when the cure does not advance, the application of spirit of lavender, ardent spirits, or even of alcohol, proves sometimes useful; and in some cases we derive advantage from bathing the parts with lime water, a solution of blue vitriol, traumatic balsam, or tincture of myrrh.

One of the greatest impediments to the cure of chancres is their taking place whether on the inside of the prepuce or upon the glans along with phymosis; for when they cannot be kept clean and dressings properly applied, the cure proves always both tedious and uncertain. In all slight cases of chancre in this situation we endeavour to cure them by injecting from time to time, between the prepuce and glans, one or other of the articles I have just mentioned sufficiently diluted; but when the sores are either deep or extensive, the operation for the phymosis should always be advised as the first part of the cure.* This being a measure to which a patient does not readily assent it is commonly postponed, by which a great deal of time is lost, and chancres often allowed to proceed

* Vide Chapter III. Section XII.

deep into the ſubſtance of the penis, which might eaſily have been healed without the hazard of this being incurred.

When an operation for this purpoſe becomes neceſſary the prepuce ſhould be divided through its whole length. We are commonly deſired to carry the inciſion only the length of the chancres, but in different inſtances I have perceived bad conſequences enſue from this. The undivided ſkin is apt to inflame and become tight, and the pain from the operation being nearly the ſame, the other as being more effectual and not productive of theſe inconveniences, ſhould be preferred.

When the cure, however, is conducted without the prepuce being laid open, beſides a very regular attention to cleanlineſs care ſhould be taken to prevent adheſions between the preputium and glans; a circumſtance particularly apt to happen when much inflammation takes place, and from which a good deal of inconveniency is afterwards experienced. This is moſt effectually prevented by making ſuch liquods as are injected paſs freely round the whole ſubſtance of the glans, and inſerting pledgits with proper dreſſings, and placing them between the prepuce and thoſe parts of the glans that are affected.

Chancres in the parts of generation of women require the ſame method of treatment as in men. The parts do not appear to be ſo irritable, ſo that they more readily admit of the eſcharrotic applications which I have mentioned. In both ſexes the cure is much promoted by confinement while nothing tends more to retard it than the fretting of the parts by motion in walking or riding on horſeback.

Where venereal ſores form upon the mons veneris and external parts of the labia pudendi, or when chancres ſpread to theſe parts, as they ſometimes do from the nymphæ clitoris, where they often begin they are commonly more foul and ſloughy than venereal ſores in any other ſituation: Neither are they ſo readily cleaned by the uſual dreſſings. Beſides a more frequent application of lunar cauſtic they require any

eſcharrotics that we employ to be uſed in powder inſtead of being mixed with ointments. They even admit of being covered from time to time with levigated verdigris; nor have the milder articles of this claſs, ſuch as calomel and red precipitate, the ſame influence in keeping them clean that we find them to have in venereal ſores in almoſt every other part. It is proper, therefore, in the treatment of ſores upon theſe parts, that this circumſtance be kept in view.

Lunar cauſtic is the beſt application for chancres upon the lips. In this ſituation ointments cannot be conveniently employed, we therefore truſt almoſt entirely to the repeated application of cauſtic; but in chancres upon the nipples the application of cauſtic creates ſo much pain that it ought never to be adviſed. We are therefore in theſe parts obliged to employ the milder dreſſings, and nothing anſwers better than the common ſaturnine ointment, or wax ointment, with a fourth part of calomel. Some advantage is alſo derived from bathing the parts affected with a ſtrong ſolution of opium in water. It leſſens irritability, by which the ſores are more readily diſpoſed to heal.

§ 2. *Of the Cure of Buboes.*

A hiſtory of the riſe and progreſs of bubo has already been given in Sect. II. of this chapter, p. 8.

Our treatment of bubo has varied and been improved by the more perfect knowledge which of late years has been obtained in the anatomy of the lymphatic ſyſtem. Till this was acquired buboes were conſidered as an effort of the ſyſtem to throw off the morbific matter of the diſeaſe, ſo that in every inſtance to promote their ſuppuration was thought to be neceſſary; but now that it is known that they are not produced by any diſeaſe of the conſtitution; that they originate from a ſtoppage of the ſyphilitic virus in its progreſs to the common courſe of the circulation; that by bringing mercury into contact with the virus while in this ſituation we can render it totally

inert; and that fores the conſequence of the ſuppuration of buboes are difficult of cure, we do not heſitate to ſay that it is the beſt practice to prevent the formation of matter, and by a proper application of mercury, combined with other means, to procure a diſcuſſion of every tumour of this kind.

But although the advantages of this practice are obvious to all who have given it a proper trial, ſtill there are many who have not adopted it, as thinking that they leſſen the hazard of the patient by inducing ſuppuration in the ſubſtance of the gland, and afterwards diſcharging the matter the conſequence of the inflammation induced by the obſtruction.

We muſt indeed acknowledge that this reaſoning would have every appearance of being well founded, and that the practice of curing buboes by diſcuſſion ought certainly to be exploded, was it to be accompliſhed by forcing the matter of infection into the ſyſtem, but as we have it in our power by a proper uſe of mercury entirely to deſtroy the nature of the matter lodged in the obſtructed gland, and as we know from daily obſervation, that when accompliſhed in this manner the diſcuſſion of buboes can never be productive of danger, it ought in all caſes to be adviſed.

The diſcuſſion of theſe tumours might often be in our power by other means than the direct application of mercury to the matter of infection; but we act with more certainty of doing no harm to the conſtitution by firſt deſtroying the active property of the matter in the obſtructed gland, and truſting afterwards to a proper courſe of mercury for obviating the effects of any part of the virus that may have paſſed into the ſyſtem.

On the firſt appearance of a bubo mercury ſhould therefore be applied ſo as that it may with moſt certainty paſs into the obſtructed gland. Hence it ſhould be chiefly applied to thoſe parts lying between the bubo and the ſpot at which the matter of infection was abſorbed; but in the ordinary ſeat of buboes the ſpace lying between theſe points is not ſufficient for the quan-

tity of mercurial ointment that muſt be employed. Where buboes form in the arm pit, or in the fore part of the thigh from venereal ſores in the hand or feet, this may at all times be done; but when ſeated in the groin, beſides rubbing the ointment on the parts lying between the chancres and the ſwellings, we alſo apply it along the inſide of the thigh and leg. When the practice of diſcuſſing buboes with mercury was firſt introduced the ointment was chiefly rubbed upon the tumour, and in many inſtances a mercurial plaſter was kept conſtantly applied to it; we find, however, that the mercury paſſes with much more certainty into the gland by applying it to thoſe parts from whence the lymphatic veſſels forming the gland take their origin.

But although a mercurial plaſter applied upon the gland ſeems to do harm, by the heat and irritation which it excites, I am of opinion that a ſmall portion of the ointment which we employ ſhould be rubbed upon it. Although none of it ſhould by this route paſs directly into the ſubſtance of the gland, ſtill it will go into the ſyſtem, and the diſcuſſion of the tumours is in many inſtances evidently promoted by gentle friction applied to it.

In our application of mercury for the purpoſe of making it paſs through a particular gland it is evident that a knowledge of the courſe of the lymphatic veſſels is a matter of importance; but we cannot always apply it, as we have already obſerved, to thoſe parts from which the greateſt number of lymphatics of the contiguous glands originate. Thus in women, where the bubo is ſometimes ſeated within an inch or ſo of the ſeat of infection, which is the caſe where the glands upon the round ligaments become obſtructed, as the lymphatics forming theſe glands ariſe perhaps chiefly from the tender ſkin of the labia pudendi, we cannot with propriety apply the ointment to theſe parts; nor can we in moſt inſtances in the treatment of buboes in men take the advantages of thoſe lymphatics which originate in the glans penis in the internal ſurface of the prepuce or ſcrotum; at leaſt wherever I have attempted to do ſo, however gently the friction was applied,

ſo much irritation was induced by it that there was an evident neceſſity for deſiſting. In the ſcrotum it is very apt to excite a fretful itchy eruption, and a conſiderable degree of uneaſineſs. In all theſe ſituations, therefore, we muſt apply the ointment to the more firm ſkin of the contiguous parts.

When the full quantity of mercury to be employed can be rubbed upon the leg and thigh of that ſide in which a bubo is ſeated, it ought certainly to be done, but the cure of the diſeaſe often requires a greater quantity of the ointment than can be uſed in this manner. In ſuch caſes we commonly apply it to the other thigh, but it may with equal ſafety and advantage be rubbed upon the arms or any part of the body.

From what has been ſaid, it will appear that we depend chiefly upon a proper application of mercury for the diſcuſſion of buboes; but we ought by no means to truſt entirely to this. When the patient is plethoric he ſhould immediately loſe blood, in quantity proportioned to his ſtrength, and his bowels ſhould be opened by a briſk purgative. It proves ſometimes ſerviceable to repeat the purgative once and again: Cold ſaturnine poultices ſhould be applied to the tumour: The patient ſhould be kept at perfect reſt: His diet ſhould be moderate; and where much irritation prevails opiates ſhould be given in ſuch doſes as are ſufficient for removing it. I think it right indeed to obſerve, that in the treatment of buboes much advantage may be derived from the uſe of opiates, and that mercury will often fail if we do not at the ſame time leſſen or remove the irritation and pain, for which nothing anſwers with ſuch certainty as the internal uſe of opiates combined with a frequent renewal of cold ſaturnine applications. In ſome inſtances I have made trial of local blood-letting by means of leeches for the diſcuſſion of venereal buboes, and in ſome caſes with advantage. In others, however, it has not proved ſo ſerviceable as this remedy commonly does in ſwellings of theſe parts that proceed entirely from inflammation. On the contrary, the irritation excited by the bites of theſe animals has in ſome appeared to do harm.

By a proper application of the remedies that have been enumerated we endeavour to carry off any inflammation that may have taken place in the tumour, while by a due continuation of mercury we ſecure the ſafety of the conſtitution. The length of time to which a courſe of mercury ſhould extend for this purpoſe can only be aſcertained by the effects which reſult from it. It ought always, however, to be continued till the ſwelled gland is nearly reduced to its natural ſize; and when chancres take place along with it, the mercury cannot with ſafety be laid aſide till the ſores have been cicatriſed for two or three weeks. But in attending to the diſcuſſion of the tumour we have no reaſon in any caſe to expect that it will be reduced altogether to its uſual ſize; for lymphatic glands when ſwelled from this cauſe commonly remain for a great length of time, and in ſome inſtances during the life of the patient, ſomewhat more full and prominent than they were before. All we have to expect therefore is, that they ſhould fall nearly to their natural ſize, and be entirely free of pain. This being accompliſhed, if no chancres or other ſymptoms of the diſeaſe exiſt, and if the full effect of the mercury has been kept up, it may with ſafety be left off at the end of a fortnight.

In buboes altogether venereal we commonly ſucceed in removing them by diſcuſſion, where the patient applies in due time and gives that attention which he ought to do to the application of the remedies; but in various inſtances we fail, and notwithſtanding all our endeavours, the tumour proceeds to ſuppuration. This may take place from various cauſes, but it happens chiefly from patients delaying too long to aſk for aſſiſtance; from their improper manner of living, and being allowed to walk about when they ought to be confined; from their not applying the mercury with that care and attention which it requires; and in many inſtances from the patient being of a ſcrophulous conſtitution; by which, although the ſyphilitic virus may be removed or deſtroyed by the mercury, ſtill it is not ſufficient for the purpoſe of carrying off that tendency to the formation of matter in the gland which the virus has produced.

As ſoon as a bubo ſhews any tendency to ſuppurate, it is the practice with many to endeavour to promote the formation of matter as ſpeedily as poſſible; but I have not found that there is any good reaſon for this. By ſtill proceeding with an attentive application of mercury, and with the uſe of cold applications, we frequently ſucceed in the diſcuſſions of theſe tumours after they have arrived at a conſiderable bulk, and in ſome inſtances even after ſome partial ſuppuration has taken place. Neither does any harm occur from the practice when it does not ſucceed; for although complete ſuppuration ſhould afterwards take place, we do not perceive that the proceſs is retarded by the mercury having been continued, while the ſores which enſue heal more kindly than they uſually do where the mercury has been previouſly laid aſide. By ſome we are told, that the uſe of mercury, during the formation of buboes, ought never to be adviſed; but although I have paid much attention to the ſubject I have never perceived that in any inſtance it has done harm, while, beſides other advantages, it ſaves a good deal of time which otherwiſe would be loſt. Even where the formation of matter has taken place to a conſiderable extent, and where it is therefore proper to promote the complete ſuppuration of the tumour by the frequent renewal of warm emollient poultices and fomentations, ſtill there is no neceſſity for deſiſting from the uſe of mercury, which ought to be continued without interruption till a ſufficient quantity is employed for the ſafety of the conſtitution. It does not prevent the ſuppuration from going forward; and the ſores which enſue from the diſcharge of the matter heal more readily, as we have already obſerved, when no interruption has been given to the exhibition of mercury.

When buboes have come to a ſtate of ſuppuration it is a queſtion with ſome whether they ſhould be opened or not, for many have obſerved that they frequently heal eaſily when they are allowed to burſt, by which the pain and terror of the operation is avoided. The reſult of my obſervation has been, that when buboes do not arrive at any great ſize we ſhould proceed with the uſe of mercury till they burſt of themſelves, unleſs where the teguments are unuſually thick; but when the ſubſtance of the gland is

entirely ſuppurated, as the matter, if thickly covered, would be a long while in getting out, and as it might in the mean time inſinuate among the ſurrounding parts, in order to prevent the inconveniencies which this would induce, we ought certainly to make an opening into it; and in all caſes of large buboes we ſhould not heſitate in adviſing them to be opened.

Our object in opening buboes ſhould be nearly the ſame as in other purulent collections. Such an opening ſhould be made as will afford a free vent to the matter, but there is no neceſſity for making it larger. In very large buboes, indeed, the teguments are apt to be ſo looſe and flabby, and the texture of the ſkin ſo much deſtroyed, that the cure would be rendered tedious was the ſkin allowed to remain. In ſuch caſes I ſometimes diſcharge the matter with cauſtic, applied in ſuch a manner as to deſtroy any part of the teguments that appear to be ſuperabundant. This, however, is not often neceſſary; and for the moſt part I have found that an opening made from the centre of the tumour, where the matter commonly points down to the moſt depending part of it, is perfectly ſufficient. Even a ſmaller opening than this would often anſwer; but it is better to make it of a ſufficient ſize at once than to be obliged to repeat a very painful operation perhaps once and again, as is often neceſſary where buboes of a large ſize are opened with ſmall inciſions. I need ſcarcely obſerve that the opening ſhould in every inſtance be continued down to the moſt depending point of the collection From want of ſufficient attention to this we meet with daily inſtances of the matter being allowed to collect, and in this manner to find acceſs to the contiguous parts, by which a great deal of diſtreſs is induced, which, with due care at firſt, might eaſily have been prevented.

This I may obſerve is a point of the firſt importance in the treatment of buboes, but it does not often meet with that attention which it merits. Patients under mercury being for the moſt part highly irritable, they ſeldom ſubmit eaſily to have buboes properly opened; ſo that although the lancet may be entered at the moſt prominent part of the tumour, which it ought always to be, the practitioner, if not firm and reſolute, is often prevented from carrying

it to the moſt depending part of it, by which ſome ſpace is left for the lodgement of matter; and however ſmall this at firſt may be, it ſeldom fails of becoming more extenſive. This again gives riſe to a great extent of ulcer, or to the formation of ſinuſes, which very conſtantly prove the ſource of much pain to the patient, and of diſtreſs and embarraſſment to the ſurgeon.

When ſinuſes in this ſituation is ſuperficial, and run little deeper than the ſkin, they are eaſily managed. No riſk is incurred in laying them open, by which, if the conſtitution is healthy, a cure will be obtained on a ſufficient quantity of mercury being given; but they ſometimes run deep, and paſs ſo near to the large blood-veſſels of theſe parts, that no attempt of this kind can with ſafety be made. In ſuch circumſtances all that art can in general do is to preſerve the external opening of the ſinuſes ſufficiently large, and by regular and equal preſſure at the different dreſſings, to prevent as much as poſſible the matter from lodging. In ſome inſtances I have derived advantage from inſerting, from time to time, a piece of cauſtic to the bottom of a deep ſinus, and applying it gently over the whole internal ſurface of the ſore. In others, the inſertion of a ſmall portion of ointment impregnated with red precipitate has proved uſeful. By removing the ſloughs with which the ſurface of theſe ſinuſes are commonly covered, they thus excite a diſpoſition over the whole to granulate and unite.

When buboes come forward to full maturation without much injury being done to the ſkin, I have in different inſtances, diſcharged the matter by the introduction of a ſmall cord or ſeton, and the practice has ſucceeded. This requires, however, the teguments to be firmer than they commonly are when a bubo is ready to be opened.

It is univerſally admitted that it is of much importance to prevent the air from finding acceſs to ſores; and as we ſometimes obſerve buboes ooze out the matter which they contain by a number of ſmall openings, and as theſe openings commonly heal eaſily, I conclude that they do ſo from their being ſo ſmall as to exclude the air entirely. In different inſtances I have attempted to imitate nature, by making a number of ſmall punctures with the point of a lancet over the whole extent of the bubo, and for the

moſt part with ſucceſs. The matter in this manner comes ſlowly off; the ſides of the abſceſs contract gradually; and when completely emptied, we find the whole parts that have been affected ſufficiently firm without any ſores or ſinuſes remaining.

When the patient has taken a ſufficient quantity of mercury, if the conſtitution in other reſpects is ſound, the ſore in moſt inſtances heals eaſily, merely by dreſſing with common cerate, and by that attention to cleanlineſs which in the treatment of ſores of every deſcription is neceſſary. It often happens however that the cure of theſe ſores proves tedious, notwithſtanding all the attention that we can give to them. Their edges become hard, livid, and often retorted; the matter thin, ſharp, and fœtid; and inſtead of healing, the ulceration gradually extends, or, if it heals in ſome parts it breaks out in others, giving a honey-comb appearance to all the contiguous parts. In ſome inſtances the tendency to this depaſcent kind of ſore is ſo great that it ſoon ſpreads over all the under part of the abdomen, and upper parts of the thigh; in ſome caſes by the matter being ſo acrid as to corrode and deſtroy all the contiguous parts with which it comes in contact, and in others by ſpreading beneath the ſkin, and burſting out from time to time in a variety of ſmall ulcers.

The ſituation of patients with ſores of this deſcription is often very deplorable. The pain with which they are attended is commonly ſevere; the acrid matter which they afford being abſorbed, hectic fever is thereby induced; the patient becomes hot and reſtleſs through the night; and almoſt a total want of appetite renders them ſoon much emaciated.

In ſuch circumſtances cicuta has ſometimes proved uſeful; and in different inſtances the ſores have been healed by it when no advantage was derived from any kind of ointment. In theſe caſes it was applied in the form of poultices, commonly by mixing the juice of the freſh herb with emollient cataplaſms. I have alſo obſerved that the recent expreſſed juice has, for internal uſe, proved more effectual than any other form of it. I have employed hyocyamus and bella-

dona fully, but ſeldom with any material advantage. Neither have I in theſe caſes obſerved any obvious benefit from ſarſaparilla; but in different inſtances mezereon, guiacum, and ſarſaparilla combined have proved uſeful, when exhibited in the manner I have already mentioned.

The moſt effectual courſe, however, which I have employed, is the application of cauſtic round all the edges and hardened parts of the ſores, conjoined with the internal uſe of opium. For a conſiderable time I truſted entirely to dreſſings of the emollient kind, being afraid of irritating parts already highly ſenſible. In ſome caſes a ſaturnine ointment has proved ſucceſsful, and in others the common calamine cerate has anſwered; but in moſt inſtances, on thoſe days in which cauſtic is not applied I have found more advantage from dreſſing with ointments prepared with a conſiderable proportion of calomel, red precipitate, or verdigris*. In ſome caſes it is neceſſary to ſprinkle theſe articles over the ſores in the form of powder, but for the moſt part they are ſufficiently powerful when mixed with ointments. Inſtead of exciting pain, as thoſe not accuſtomed to uſe them are apt to ſuſpect, they commonly remove it; and they ſeldom fail to alter the diſcharge from a thin acrid ſanies, to a well digeſted pus.

The application of lunar cauſtic indeed always excites pain at firſt, but this ſoon ſubſides, eſpecially when the internal exhibition of opium is adviſed along with it. Indeed opium of itſelf proves often uſeful in ſores of this deſcription, not by acting, as ſome have imagined, as an antiſyphilitic remedy but by removing, as I have already had occaſion to obſerve, that pain and irritation with which ſores diſcharging acrid matter are uſually accompanied. By removing this ſtate of irritability it deſtroys the diſpoſition in the veſſels of the ſore to form that kind of matter, which, by its own acrimony, ſerves to perpetuate the ulceration; and this being accompliſhed, when no

* Vide Appendix, Nos. 26, 27, 28.

other interruption takes place, nature alone ſeldom fails to complete the cure.

In ſome inſtances I have known ſores in this ſituation which reſiſted every other remedy ſoon healed by being fumigated from time to time with cinnabar: In others warm ſalt-water bathing, and afterward the ordinary form of ſea-bathing has proved uſeful; while in ſome a cure has not been obtained but with an entire change of regimen. Where the patient has previouſly lived upon milk and vegetables a moderate allowance of wine and animal food has proved ſerviceable, while thoſe who have previouſly been accuſtomed to full living have derived much advantage from a diet conſiſting altogether of vegetables and milk. In all ſuch caſes country air proves particularly uſeful.

Where mercurial fumigations are employed for the cure of theſe ſores they ſhould be conveyed to the parts affected by metallic tubes, and kept applied to them for the ſpace of twenty-five minutes or half an hour at once, and this ſhould be repeated every ſecond or third day, for ſix or eight times.

For ſome time paſt I have been making trial of the muriated barytes, a remedy lately brought into notice by the ingenious Dr. Crawford of London.* Theſe trials have been chiefly confined to ſores and tumours produced by ſcrophula, but I have alſo made uſe of it in ſome of thoſe ſpreading ulcers which we are now conſidering, after there was no cauſe to doubt of the ſyphilitic virus being eradicated, and in ſome inſtances I think with advantage. I have not as yet, however, given it in a ſufficient number of caſes to be able to ſpeak of it with preciſion.

Beſides this ſtate of bubo there is another which in ſome inſtances proves very diſtreſsful, in which the tumour, after arriving at a conſiderable bulk, remains nearly ſtationary, and ſhews no tendency either to ſuppurate or diſſolve, notwithſtanding of all the remedies we may employ.

For the moſt part this indolent ſtate of bubo depends upon the patient being of a ſcrophulous conſtitution; but whatever may be the cauſe, our firſt object ſhould be to

* Vide Appendix, No. 32.

employ that quantity of mercury which may appear to be neceſſary for rendering the ſyſtem ſafe.

Unction affords here likewiſe the beſt form of uſing mercury; by making it paſs through the diſeaſed parts diſcuſſion of the tumour is more readily accompliſhed than when the medicine is given by the mouth. Even this, however, will in ſome inſtances be continued without any advantage for a great length of time. In ſuch circumſtances I have in various caſes adviſed bliſters to be repeatedly applied over the tumours. They never do harm, and in ſome caſes they have proved evidently uſeful. In others electricity has proved ſerviceable, but it is neceſſary to continue it for ſeveral weeks in order to judge of its influence; and it ought to be continued longer at each time of applying it than is uſually done. In four caſes of indolent tumours where electricity proved ſucceſsful, and two of theſe were of the kind we are now conſidering, no advantage was derived from the common way of uſing it. In all of theſe it was applied for the ſpace of half an hour at once; this was repeated three times a-day, and at each application ſparks were not only taken from the ſurface of the tumours, but gentle ſhocks were paſſed through them. For the firſt two or three weeks ſcarcely any alteration was perceived in any of them, but they all decreaſed ſuddenly at laſt. One of them of conſiderable ſize, which had been of eight months duration, and in ſome parts of which matter ſeemed to have formed, was reduced to the fourth part of its bulk in the courſe of a few days from the period at which it began to diminiſh. In this ſtate of theſe tumours a long continued uſe of cicuta proves ſometimes ſerviceable; and I have ſeen evident advantages from ſea-bathing, and from drinking as much ſalt water daily as the patient can bear without being much purged.

Before entering upon the uſe of cold bathing I have in ſome caſes adviſed warm ſalt water to be poured upon the ſwelling morning and evening, for the ſpace of two or three weeks, and for the moſt part it has appeared to prove uſeful.

In the courſe of time buboes in this ſtate ſometimes become ſoft, and ſhew a tendency to ſuppurate, although they may not have done ſo before. It is here that I have ob-

ſerved the warm gum plaſters prove moſt uſeful. By ſtimulating the veſſels of the diſeaſed parts they ſeem to excite that kind of effuſion which readily proceeds to a ſtate of purulency.

But the moſt alarming circumſtance to patients with tumours in this indolent ſtate, is, a ſuſpicion which they are apt to entertain that they may ſome time or other end in cancer. This is, however, ſo rare an occurrence, that it ſhould ſcarcely give any cauſe of alarm. The phagadenic ſores which occaſionally ſucceed to buboes, and of which we have already taken notice, ſometimes put on a cancerous appearance, but the real ſchirrus which terminates in cancer is rarely if ever the conſequence of a venereal bubo. In different inſtances I have been conſulted for indolent tumours in theſe parts on ſuſpicicion of their being cancerous, but I conclude that they are ſeldom or never of this nature, from all of them having done well where the patients have been perſuaded not to meddle with them. They often indeed remain conſiderably enlarged for a great length of time; but when they do not ulcerate no danger is to be dreaded. Wherever parts in this ſituation, however, become cancerous, they ought to be extirpated while they remain in a moveable ſtate.

§ 3. *Of the Cure of Venereal Ulcers.*

In the two preceding ſections we have treated of the cure of chancres, and of thoſe ulcers which ſucceed to buboes, both of which, but particularly the firſt, may be conſidered as primary ſymptoms of the diſeaſe, as they may take place without the ſyſtem being in any degree injured. At preſent we have to conſider the treatment of thoſe ulcers which originate from the ſyphilitic virus having entered the conſtitution, and of which a deſcription has been given in the ſecond ſection of this chapter, page 34.

In the management of theſe ulcers our chief dependence is upon a well-regulated courſe of mercury; and I believe, that in general it is the beſt practice to truſt in the firſt inſtance to mercury alone, and not to haſten the healing of the ſores by any other means than the application of mild dreſſings and due attention to cleanlineſs. Under this treat-

ment we reſt aſſured that the cure is altogether accompliſhed by the deſtruction of the virus, which muſt always be a more doubtful queſtion where cauſtic remedies have been employed.

There are ſome exceptions, however, to this, and I conſider it as of much importance in practice that they be kept in view. Venereal ſores may be ſo ſituated, and in ſuch a ſtate that their farther progreſs may be attended with the loſs of parts materially neceſſary for life, or for the future comfort of the patient, as is the caſe with ulcers that have already penetrated deep in the throat, mouth, noſe, lips, or face. In all theſe ſituations, particularly in the throat, noſe, and lips, they uſually proceed with more rapidity than in other parts of the body, ſo that by truſting to the internal uſe of mercury alone ſuch a deſtruction of parts often takes place as proves afterwards highly diſtreſsful. On this account the cure ought to be haſtened as much as poſſible by the uſe of ſuch dreſſings as we find from experience prove moſt effectual; and no harm can enſue from this being conjoined with whatever quantity of mercury may be required.

In all ſores truly venereal, wherever they may be ſituated, the parts are moſt ſpeedily brought to a healing condition by a free application of cauſtic, but the practice has ſeldom, I believe, been conſidered as applicable to ulcers in the mouth, throat, or internal parts of the noſe. For many years paſt, however, I have been in the practice of uſing cauſtic as well as other eſcharrotics in the cure of theſe ulcers with the greateſt freedom. No danger has ever enſued from it; and in various inſtances it has contributed to ſave the uvula and other parts of the throat, which otherwiſe were in great danger of being deſtroyed. Cauſtic fixed in a tube ſix or ſeven inches in length may be eaſily conveyed to any part of the mouth or throat, and the tube anſwers the purpoſe whether it be curved or ſtraight. Cauſtic excites leſs pain in theſe parts than it uſually does in other parts of the body, and it ſeldom fails to remove the irritation which accompanies theſe ulcers, and in this manner to diſpoſe them to heal. One application ſeldom proves ſufficient. Till the mercury has completely entered the ſyſtem, it requires to

be repeated once and again, perhaps every ſecond or third day, and in the intermediate days I cauſe the parts to be touched occaſionally either with a weak ſolution of corroſive ſublimate or with a ſtrong impregnation of honey with mercury, which in all ſores of this deſcription is a very uſeful application.*

In the deſcription which I have given of the venereal ſore throat, page 30 of this volume, I have endeavoured to point out marks of diſtinction between it and affections of the throat, the conſequences of other cauſes, and particularly thoſe by which it may be diſtinguiſhed from ulcerations of the mouth and throat which mercury is apt to induce. Among other means of diſtinction may be mentioned the different effects produced upon them by cauſtic. In the true venereal ulcer, after the firſt irritation which it excites is over, a good deal of relief is obtained from it, and the parts ſoon aſſume a clean healing appearance; whereas, in ſores induced by mercury the application of cauſtic not only gives very intenſe pain at firſt, but this is apt to continue for a conſiderable time, while the ſores retain nearly the ſame appearances, however frequently the remedy may be repeated.

In the noſe and outer parts of the lips, theſe ulcers beſides being touched with cauſtic, may be dreſſed with ointments impregnated with calomel, red precipitate, and even with verdigris; but theſe remedies are inadmiſſible to the throat and inſide of the mouth from the danger that would enſue from their paſſing into the ſtomach.

Even in venereal ulcers of other parts of the body we are often obliged at laſt to employ remedies of this claſs. For the moſt part they become clean ſoon after mercury is taken in ſufficient quantity for rendering the mouth ſore, and they frequently heal, merely by continuing the courſe of mercury for a ſufficient length of time. But this does not always happen; for although the ſores may become clean, and even contract, they are very apt to become ſtationary at laſt;

* Vide Appendix. No. 5.

and do not ſhow any diſpoſition to heal, however long the mercury may be continued. When we perceive this to be the caſe, the mild dreſſings which we employed at firſt ſhould be laid aſide. The parts ſhould be completely touched with lunar cauſtic every ſecond or third day, and at other times dreſſed with calomel, or red precipitate ointment. In ſome caſes we ſucceed by bathing with a weak ſolution of corroſive ſublimate, or verdigris; but the ointments for the moſt part prove more effectual.

By thus connecting a regular attention to the external management of the ſores, with a due perſeverance in the uſe of mercury, we very commonly prove ſucceſsful at laſt; but even this does not always anſwer. In ſome inſtances, the ulcers inſtead of becoming clean and putting on a healing appearance, remain foul and equally extenſive as at firſt.

In ſuch circumſtances we ſometimes ſucceed by changing the preparation of mercury, and in others by making ſome variety in the dreſſings applied to the ſores. We ſhould not, therefore, reſt ſatisfied with one mode of treatment, but where no advantage is obtained from the ſecond or third variation of the remedies, particularly if the cauſtic has been ſufficiently powerful, and the mouth kept for a due length of time completely ſore with the mercury, we may in that caſe be aſſured either that ſome other diſeaſe prevails in the ſyſtem or that the ſores are rendered obſtinate by an affection of the contiguous parts.

Scrophula and ſcurvy are the diſeaſes of the conſtitution by which the cure of theſe ſores is moſt apt to be obſtructed. Venereal ulcers will no doubt heal in ſcrophulous conſtitutions. Of this we have daily inſtances; but it is equally certain that the contrary often happens, and with ſuch certainty does ſcurvy obſtruct the operation of mercury that a cure can ſcarcely be obtained as we have already obſerved, of any of the more inveterate ſymptoms of ſyphilis while the ſcorbutic diatheſis exiſt in any conſiderable degree. Where either of theſe diſeaſes is therefore found to be the cauſe of our failure, thoſe remedies muſt be

employed which prove moſt ſucceſsful in removing them, but having already in different parts of this work had occaſion to ſpeak particularly upon this ſubject, it will not here be neceſſary to conſider it farther.

The local affection which occurs as the moſt frequent impediment to the cure of theſe ſores, is a diſeaſed ſtate of the bones above which they are ſeated, or of the membranes covering theſe bones. In either of theſe caſes, although the virus of the diſeaſe may be eradicated by a courſe of mercury, ſtill the ſores will continue foul, nor will they ſhow any tendency to heal, however long the mercury may be continued. Ulcers of this deſcription being frequently connected with this diſeaſed ſtate of the parts beneath are often the cauſe of more mercury being employed than would otherwiſe be judged neceſſary, for we are too apt to ſuppoſe that all ſuch ſores as were at firſt produced by Lues Venerea are to be cured by mercury alone; an error that has been the cauſe of much mercury being very unneceſſarily given.

Whether the bone, or only the perioſteum be at firſt affected, our practice muſt be nearly the ſame; for in ſuch circumſtances, where the perioſteum is ſo much diſeaſed as to reſiſt the effects of a full courſe of mercury, there muſt ultimately be a partial exfoliation of the bone beneath, before a permanent cure will take place. The ſoft unhealthy granulations with which ſores in this ſtate are apt to be covered muſt be deſtroyed with proper eſcharrotics, and the exfoliation of the bone muſt be promoted by all ſuch means as uſually prove moſt effectual for that purpoſe, and for which books on ſurgery may be conſulted. I may here ſhortly obſerve, that the beſt eſcharrotic I have employed for the deſtruction of theſe fungous excreſcences which ſprout upon the ſurface of the diſeaſed bones is a combination of red precipitate and calcined allum, which proves much more powerful than either of theſe articles when uſed ſeparately, and more ef-

fectual even than cauſtic in the uſual way of applying it*.

On the diſeaſed parts of the bone being removed a cure will ſoon take place if a ſufficient quantity of mercury has been given; otherwiſe the ſore will aſſume the uſual appearances of a venereal ulcer, and will not heal till another courſe of mercury is adviſed.

With reſpect to the quantity of mercury to be given for the cure of venereal ulcers, this muſt at all times be regulated by the effects which reſult from it, and theſe again will in a great meaſure depend upon the duration of the diſeaſe. When the diſeaſe has been of ſhort continuance, and the ſores heal eaſily without the aſſiſtance of external applications, the mercury, if given in full quantity, need never be continued above three weeks after they are cicatriſed; but we ſhould proceed with it for the ſpace of a month where the ſyſtem has either been long infected, or where we have judged it neceſſary to heal the ſores quickly by the application of cauſtic or eſcharrotics. Thus, in an ulcer in the throat, which we might ſuppoſe would require the patient to be under mercury for the ſpace of a fortnight, merely in order to cicatriſe it, and for another fortnight, that is, for the ſpace of a month in all, in order to render his conſtitution ſafe, if by the application of cauſtic the ulcer ſhall be cicatriſed in a week, the mercury ſhould be perſiſted in for a month thereafter, or for five weeks in all.

By ſome it has been doubted whether it is neceſſary to perſevere in the uſe of mercury after the ſymptoms for which it is given are removed; but theſe doubts have only been ſuggeſted by thoſe, who, from want of ſufficient experience are not capable of judging, or by others who in the ſupport of a theory which they have adopted, allow their judgments to be ſo far perverted that they loſe ſight of every fact and argument that militates againſt it. There is nothing more certain than that venereal ulcers, as well as every other ſymptom of the diſeaſe, may be completely

* A preſcription is given for this article No. 44, Appendix to Vol. I.

removed by mercury, and yet that the diſeaſe will return in the ſame or ſome other form, if we do not perſiſt in the uſe of mercury for ſome time thereafter; that is, the diſeaſe itſelf may be cured while the diſpoſition remains. All the ſymptoms may be carried off entirely, and yet the virus ſubſiſt in ſuch force that they will at ſome future period break out again. The length of time to which the uſe of mercury ſhould be protracted for removing this diſpoſition it is not always eaſy to aſcertain. In this and ſome of the preceding ſections I have mentioned the reſult of my own experience upon this point, but this can only be done in general terms, and the quantity of mercury to be given in any particular caſe muſt in a great meaſure be regulated by the judgment of the practitioner in attendance.

Towards the cloſe of a mercurial courſe employed for the cure of venereal ulcers of long duration, decoctions of ſarſaparilla, mezereon, and guiacum are ſometimes given with advantage. The latter I have already mentioned as the moſt effectual of theſe, but in ſome inſtances a combination of the whole has appeared to prove more powerful than any one of them uſed ſeparately. Many alledge that no advantage is derived from any of theſe; but although I was once of this opinion I am now perfectly convinced that ulcers of this deſcription frequently heal more eaſily when a mercurial courſe is conjoined with a decoction ſuch as I have mentioned, than when the mercury is given entirely by itſelf.

In theſe ulcers, when much irritation prevails, opium proves particularly uſeful. I have in various inſtances, indeed, found that all other remedies are of no avail till this irritability of the parts is removed. In ſome caſes this may be done with hyocyamus. Three or four grains of the extract given at bed time very commonly acts as an anodyne, and I conclude that cicuta, when it proves uſeful here, acts alſo in this manner; but when the irritation is conſiderable opium is the only remedy upon which we can depend. It ought therefore in all caſes to be given where the ſores do not ſoon become perfectly eaſy on the mercury taking full effect, and which they commonly do when they are altogether venereal.

§ 4. *Of the Cure of Venereal Blotches.*

A description of this symptom is given in Section II. of this Chapter, p. 41.

Almost the only remedy employed for the cure of venereal blotches is mercury, and when the course is well conducted it seldom fails. We never find it necessary to have recourse to external applications unless the eruptions become hot and uneasy, in which case relief is sometimes obtained from dusting the parts with flour or starch powder, as is done in cases of erysipelas.

Where the usual method of exhibiting mercury has failed in the cure of these eruptions, corrosive sublimate has appeared to prove useful; but as the medicine in this form cannot be given in large quantities, it requires to be continued for a great length of time. It should be regularly given for at least six weeks after the blotches have disappeared; and it seems to operate with most certainty when conjoined with the decoction which I have just had occasion to mention. The Lisbon diet-drink is said to have proved particularly useful in the cure of this symptom.* Antimonials, from their well known property of exciting a determination to the skin, are frequently combined with mercury in the cure of venereal blotches. Upon this principle I conceive to be formed many of the quack remedies generally employed in cutaneous affections; and it is for the cure of this symptom of syphilis that Plummer's pill has been most frequently used.†

Crude antimony is, in cases of this kind a favourite medicine with some practitioners, and when conjoined with mercury I think I have observed it prove useful. It may be given either in powder or pills, to the extent of fifteen or twenty grains three times a-day; and besides being given along with the mercury, it may be continued with advantage for two or three weeks after the mercurial course is over.

* Vide Appendix, Vol. I. No. 4. † Vide Vol. II. No. 21.

§ 5. *Of the Cure of Nodes, Swellings of the Periosteum, &c.*

A description of these swellings has already been given in section II. page 52; and it is of importance in the method of cure to distinguish them accurately.

In all the affections to which the periosteum and bones are liable from the syphilitic virus, mercury ought to be given immediately, for it is upon this remedy that we chiefly depend. Where the bones are much swelled, that is, where tumours truly osseous have arrived at any great bulk, mercury alone will not prove sufficient; for although it may destroy the constitutional infection, these tumours will remain, but when given immediately upon their first appearance, it will prevent their farther increase; and as they are always small at first, although they may never disappear entirely no inconvenience will be experienced from their remaining in this state, even during the life of the patient.

The method of throwing mercury into the system by unction is the best adapted for this symptom, as it is perhaps with a very few exceptions for the cure of every symptom of the disease; but it does not appear that any advantage is derived from rubbing the ointment upon the tumours. On the contrary, by tending to irritate and fret the skin, it renders them more painful, so that it answers better to apply it to other parts.

As the bones seldom become affected till the disease has been of long duration, it is perhaps for this reason that more mercury is in general required for the cure of this symptom than for any other syphilitic affection. I believe, however, that we are often deceived in this, and continue to give mercury for the cure of the local affection long after the virus by which it was produced is eradicated, and for which purpose alone it was prescribed. Next to the state of the system, which we render safe by a due continuation of the mercurial course, the pain excited by the tumour is the symptom which chiefly requires attention.

When the mercury is employed immediately upon the ſwelling taking place the pain commonly ſubſides ſoon; but if the tumour has previouſly arrived at any conſiderable bulk, the pain which it excites is apt to be ſevere, while it is not allayed or even leſſened by all the mercury we can employ. Where the ſkin has become inflamed and painful, ſome relief will be obtained from ſaturnine applications; but as the pain depends chiefly on the ſtretching of the periofteum by the tumour of the bone, whenever it becomes ſevere nothing will prove effectual but the diviſion of this membrane. No practitioner would lay a bone bare for a moderate degree of pain, whatever the cauſe of it might be; but whenever the pain produced by nodes becomes diſtreſsful, and is not allayed by a courſe of mercury, as I know of no other remedy that will give relief, I conclude that we are fully juſtified in adviſing an inciſion to be made completely through the periofteum, along the whole courſe of the tumour.

Where the bone is not ſo much increaſed in bulk, and not otherwiſe diſeaſed, if a ſufficient quantity of mercury has been given for the deſtruction of the virus, a cure may be obtained without any part of it exfoliating. With which view the mildeſt dreſſings only ſhould be employed, while the ſore is protected as effectually as poſſible from acceſs to the air. But, when the tumour of the bone is conſiderable, and particularly when caries has taken place, as it would be vain to expect a cure but with the exfoliation of the diſeaſed parts of the bone, ſo all ſuch means ſhould be employed for effecting this as are known to be moſt powerful. Any of the ſoft parts covering the diſeaſed part of the bone ſhould be removed with eſcharrotics. Small holes ſhould be drilled through the carious part of the bone, and the ſore ſhould be dreſſed with precipitate or verdigris ointments, of ſuch a ſtrength as to act gently as ſtimulants upon the contiguous parts. By due perſeverance in this mode of treatment, and taking care at the ſame time to ſupport the ſtrength of the patient with a nouriſhing diet, the diſeaſed parts of the bone will at laſt exfoliate, when the healing of the ſore not being impeded by any other cauſe, a cure will ſoon be obtained with common treatment.

The next variety of tumour taken notice of in the deſcription which I have given of nodes, proceeds, as we have

had occaſion to ſee, from the effuſion of a thin fluid between the perioſteum and ſurface of the bone. This alſo is apt to be accompanied with ſevere pain; but as the pain is induced by the diſtenſion of the perioſteum, in conſequence of a fluid being collected beneath, and as this fluid is frequently abſorbed on the mercury taking effect, we ſeldom find it neceſſary to lay this variety of tumour open. Abſorption of the matter is ſometimes promoted by the application of a bliſter to the part, or by rubbing it occaſionally with ſtimulants, ſuch as volatile liniment or tincture of cantharides. But when the ſwelling has been of long duration, as the ſurface of the bone is in this caſe commonly injured, as the abſorption of the matter does not take place ſo readily, and as the tumour at the end of the mercurial courſe is commonly larger than before, an inciſion the whole length of the tumour ſhould be made through the perioſteum, and the wound dreſſed in the manner juſt now adviſed. I think it right, however, to obſerve, that the opening of theſe tumours is very ſeldom neceſſary; and that it would in no inſtance perhaps be ſo if mercury was given in ſufficient quantity ſoon after their formation. Even where the quantity of effuſed fluid is conſiderable, the ſwelling for the moſt part begins to leſſen ſoon after the mercury has fully entered the ſyſtem; and if the effect of the medicine is kept up for a ſufficient length of time we ſeldom fail in removing it entirely.

In thoſe diffuſed ſwellings upon the bones which I have taken notice of in the deſcription as a ſymptom of ſyphilis, and which alſo have improperly been termed nodes, mercury, when properly given, ſeldom fails to effect a cure; but it requires to be given in as large quantities as the patient can bear, and to be continued for a conſiderable time, commonly for nine or ten weeks. The pain indeed ſoon ſubſides upon the mercury taking full effect; but when the ſwelling has been of long continuance, as often happens before mercury is given, from the diſeaſe being at firſt apt to be miſtaken for rheumatiſm, in order to remove it the mercury muſt be employed for ſeveral weeks after the pain has ceaſed. In the treatment of this ſymptom bliſters prove particularly uſeful, and they ſhould be applied along the whole courſe of the ſwelling.

Where the ligaments, tendons, and faſciæ of muſcles, become ſwelled, as ſometimes happens from the matter of venereal ulcers ſpreading to thoſe parts from the ſkin and cellular ſubſtance where they originate, we depend entirely upon a courſe of mercury, with proper attention to the external treatment of the ulcers in the manner we have already pointed out.

§ 6. *Of the Cure of Venereal Excreſcences about the Anus.*

In ſection ſecond of this chapter, a very particular deſcription has been given of theſe excreſcences.

A full mercurial courſe is the remedy for theſe excreſcences, under which they gradually leſſen, and at laſt very commonly diſappear altogether; but where we are diſappointed in this, we muſt uſe the ſame applications recommended for the removal of the warty excreſcences which ſucceed to Gonorrhœa.*

The diſeaſe being now entirely local, no advantage can accrue from mercury being longer continued, while we ſeldom fail with a proper application of eſcharrotics.

Where the ſurface of theſe excreſcences becomes ulcerated, and yields matter, ſaturnine lotions and other aſtringents ſhould be employed to heal them; for as the matter which they afford appears to be venereal, and of which we judge from the real venereal bubo being in women ſometimes produced by it, the longer that this ſecretion is allowed to continue the more of it will paſs into the ſyſtem, and the greater the riſk will therefore be of ſome of the glands in its courſe towards the heart being obſtructed.

§ 7. *Of the Cure of the Venereal Swelled Teſticle.*

For the deſcription of this affection of the teſticle, and of the difference between it and other tumours

* Vide Chapter III. Section XIII. Vol. I.

to which the teſtis is liable, I muſt refer to ſection ſecond of this chapter.

One important difference between this tumefaction of the teſticle and that which proceeds from Gonorrhœa is, that in the latter mercury very frequently does harm, while in this it is the remedy upon which we chiefly place dependence. Unleſs the ſwelling has been allowed to advance to a great ſize, from an opinion which ſome have entertained that it is always of a local nature, and not connected with diſeaſes of the conſtitution, mercury ſeldom fails to cure it. Were it not to add conſiderably to the extent of the preſent work, this, as well as many other points, of which I have had occaſion to take particular notice, might be illuſtrated and proved by a variety of caſes which have fallen under my obſervation, in which the ſwelling of the teſtis to which I allude, produced altogether by the ſyphilitic virus in the ſyſtem, and in many inſtances where Gonorrhœa never exiſted, after reſiſting every other remedy, has at laſt been completely cured by mercury. Beſides other views of no ſmall importance in the theory of the diſeaſe, which this tends to eſtabliſh, it may be looked upon as an additional argument for conſidering the matter of Gonorrhœa and of pox as different. The ſwelling of the teſtis which occurs in Gonorrhœa yields entirely to the effects of an antiphlogiſtic courſe and without doing an injury to the conſtitution, while the other in no inſtance has been known to do ſo, and gives way only to that remedy which we know by experience is alone to be truſted for the cure of every other ſymptom of ſyphilis.

Mercury even proves effectual in removing thoſe tumours in which matter has formed. I have met with ſeveral caſes in which a partial ſuppuration had taken place in the body of the teſtis before mercury was given, and the matter has been abſorbed, and the ſwelling entirely removed ſoon after a ſufficient quantity of the medicine has been thrown in. In ſome I have thought that mercury was aſſiſted by a decoction of mezereon being given along with it; but it is for the moſt part abundantly ſucceſsful by itſelf.

Where the uſe of mercury has been too long delayed the ſwelling commonly ſuppurates, and the ſore which enſues from the burſting of the tumour aſſumes always a very ugly appearance. Even in this ſituation, however, our chief advantage is derived from mercury; nor do we often fail in curing the ſore if due attention is given to regular dreſſings, and procuring a free diſcharge of the matter. The beſt dreſſings for this purpoſe are the ſaturnine and zinc ointments when the parts are clean, and the precipitate or verdigris ointments when they are foul or ſloughy.

But where matter is obſerved to lodge in any part of the ſwelling, nothing can be of advantage but making a free opening into it. This, however, is not always done ſo completely as it ought to be. The teſtes being organs of much delicacy, we are apt to be afraid of opening any abſceſſes that may form in them, in conſequence of which the matter is apt to find acceſs into the cellular ſubſtance of the ſcrotum, where it ſeldom fails to produce very troubleſome ſinuſes. This however, may always be prevented, either by making a free inciſion into the moſt depending part of the abſceſs, without allowing it to burſt, or taking care to enlarge the opening if it has previouſly made way for itſelf. Nor ſhould we ever be afraid of doing ſo, for the injury which this may do to the teſticle cannot be equal to what it muſt ſuffer from matter being allowed to lodge in it. In all ſuch circumſtances I never heſitate to lay the teſticle freely open, and no inconvenience ever enſues from it.

As this affection of the teſticle never occurs but in very advanced ſtages of ſyphilis, it requires a very conſiderable quantity of mercury to remove it, and at the ſame time to eradicate the virus from the ſyſtem by which it has been produced. It ought to be continued from ten to twelve weeks, and in as great quantities as the patient can bear.

When the ſores which enſue from the burſting or opening of theſe tumours do not heal after ſuch a quantity of mercury is exhibited as we judge to be proper for the ſafety of the conſtitution, ſome advantages is

occaſionally derived from a plentiful uſe of hemlock, and from ſea-bathing; but in ſuch circumſtances nothing proves for the moſt part ſo uſeful as dreſſing the parts in the manner I have mentioned with ſtimulating ointments, and touching them occaſionally with cauſtic. This we are alſo apt to be afraid of from the natural irritability of theſe parts; but I have not found that there is cauſe for this. On the contrary, a free application of cauſtic to the ſurface of theſe ſores renders them for the moſt part leſs painful. Where much irritation however prevails, and is not removed or much leſſened by the uſe of cauſtic, opiates muſt be given in ſuch quantities as are ſufficient to allay it.

Of the Treatment of Alopecia, Venereal Blindneſs, and Deafneſs.

A deſcription of theſe ſymptoms was given in Section II. of this chapter, § 11. 12. and 13.

When alopecia, or the falling off of the hair takes place in any conſiderable degree before mercury is employed, particularly if the patient is advanced in years, it never grows again but in very ſmall quantities; but during youth, and when mercury is given in the commencement of this ſymptom, we not only prevent it from advancing farther, but any hair that has been loſt will very commonly be renewed. There is ſcarcely indeed any other remedy upon which we can depend but a full courſe of mercury; for although many external applications are recommended to recover or renew hair loſt in this manner, there is no reaſon to ſuppoſe that any advantage is derived from them.

Where the falling away of the hair is connected with a ſcurf over the head, ſome benefit indeed is obtained from the application of external remedies; by removing the eruption we tend to prevent any farther loſs of hair, and the internal uſe of mercury alone is not altogether ſufficient for this. The moſt effectual applications for the removal of this are the unguentum citrinum,* and a weak ſolution

* Vide Appendix, No. 14.

of corrosive sublimate in water. When the former is used the parts should be rubbed with it once a-day. The latter may be applied three or four times daily, in the proportion of half a grain of the mercury to an ounce of water; and for the more effectual application of these remedies, the head should be shaved, and the hair not allowed to grow till the eruption or scurf is entirely removed.

In the treatment of blindness as a symptom of Lues Venerea, we have scarcely any variety of practice. Mercury is perhaps the only remedy from which any advantage is to be expected; nor does it prove of any avail if it be not given immediately, and in as great quantities as the patient can bear. Whether the eye is therefore affected with gutta serena, cataract, or effusions upon the cornea, where there is the least reason to suppose that the affection proceeds from Lues Venerea, the patient should be immediately put under a complete course of mercury, and his mouth kept fully affected for the space of ten, eleven, or twelve weeks, according to the effects which may arise from it.

In gutta serena it may be proper before mercury is given to premise a smart purgative or two, and during the course to conjoin the repeated application of blisters to the temples and head, with electricity, and errhines for the purpose of exciting a discharge by the nose, although the effects of these remedies are so uncertain that in every instance our chief dependence must rest upon mercury.

Where the blindness is found to proceed from cataracts, if mercury does not succeed in removing the opacity, our only remedy must be the usual operation of depressing or extracting the chrystallines. This will not always succeed, but where the eye is otherwise sound, and only the local affection of the lens appearing to be the cause of blindness we ought in every instance to advise it.

We sometimes find that mercury here proves so far useful as to lessen the opacity of the lens in a considerable degree, without removing it entirely; and where this has happened I have found in more instances than one that a cure has been accomplished by electricity. I have never perceived, however, that electricity has produced any advantage where the opacity was not previously much dimi-

niſhed, and even in this ſituation it requires to be long continued in order to prove effectual.

In blindneſs produced by the humours of the eye becoming confuſed or turbid, where it is known that this proceeds from the ſyſtem being affected with ſyphilis, the patient ought no doubt to be put under mercury; but this cauſe of blindneſs is of a very hopeleſs nature, for I have never known an inſtance of its being removed. Neither do we prove very ſucceſsful even with mercury, where viſion is affected by the matter of ſyphilis fixing upon the coats of the eye. We may prevent the diſeaſe from advancing much farther, but mercury does not appear to be ſufficient for removing any conſiderable degree of opacity in the cornea that has already taken place. Nor does this cauſe of blindneſs admit of remedy by means of a ſurgical operation; for it is not upon the ſurface, but in the very ſubſtance of the cornea that it is ſeated.

When abſceſſes form in the coats of the eye, we have it in our power by diſcharging the matter which they contain to remove in ſome degree the deformity which they produce, as well as the pain with which they are accompanied; but we are not to look for any farther advantage from this or any other remedy that can be propoſed.

Of all the ſymptoms of Lues Venerea, none prove more obſtinate, nor are leſs acted upon by mercury than deafneſs. A certain degree of deafneſs, indeed, produced by venereal ulceration or ſwelling at the opening of the Euſtachian tube in the throat is ſometimes relieved or even removed by a courſe of mercury; but no advantage is ever obtained from this or any other remedy where the diſeaſe has fixed upon the membrane or bones of the ear. In the deſcription of this ſymptom, I had occaſion to remark, that a temporary deafneſs is ſometimes produced in Lues Venerea by the meatus externus being filled up by a ſcurfy eruption; and in ſome inſtances, by the membrane of the paſſage becoming thickened and even ulcerated. In this, as in other ſymptoms of the diſeaſe, we depend entirely on the internal uſe of mercury for removing the virus from the conſtitution; but the local affection may remain after the ſyſtem is rendered ſafe. The beſt remedy I have employed for this is a cautious uſe of bougies. Care, howe-

ver, muſt be taken that they be not puſhed ſo deep into the paſſage as to injure the tympanum; and they ought to be formed of the mildeſt materials, as they never fail to do harm when they excite much irritation.

§ 9. *Of the Cure of ſome Anomalous Symptoms of Lues Venerea.*

In ſection ſecond of this chapter, page 69, ſundry anomalous ſymptoms of ſyphilis are enumerated which could not with propriety be deſcribed in any of the preceding ſections.

For the cure of theſe we depend almoſt entirely upon a full courſe of mercury. Scarcely any of them occur but in the later ſtages of the diſeaſe, and they are very apt to recur, if the medicine be not given in as large quantities as the patient can bear and continued for a conſiderable time after they have diſappeared. Beſides this general courſe of treatment, ſome of theſe ſymptoms require a peculiarity of local management.

The firſt that I have mentioned are theſe chops or clefts in the palms of the hands and ſoles of the feet to which ſyphilitic patients are ſometimes liable. The beſt dreſſings that I have employed for theſe are the unguentum citrinum,* and unguentum e mercurio precipit. Rubr.†. But while theſe ointments are perhaps the beſt that can be applied to the chops themſelves, they are too irritating to admit of being applied to the contiguous parts, which for the moſt part are red and tender, and which are beſt defended by the unguentum ſaturninum.‡

For the removal of that ſcurf and gummy matter which occaſionally forms and becomes very troubleſome upon the eye-lids of ſyphilitic patients, I have found nothing anſwer ſo well as bathing them from time to time with a weak ſolution of white vitriol, and applying over the eye-laſhes and cartilaginous border of the eye-lids a ſmall portion of the calamine liniment,§ or unguentum citrinum, ſo much reduced with axunge as to prevent it from exciting too much irritation.

* Vide Appendix, No. 14. No. 27.
† Vide Appendix, No. 29. § No. 31.

The fores which fucceed to the fwellings defcribed in p. 70, are frequently healed by mercury alone, but in fome inftances they refift even this and all the dreffings we can employ. Cauftic and other efcharrotics prove to be the beft applications here, as we find them indeed to be in almoft every variety of venereal ulcer. When they do not fucceed, it is for the moft part owing to a greater degree of irritation and pain in the fore than is conftftent with the procefs of healing. In this cafe nothing proves fo effectual as fufficient dofes of opiates.

When the pains mentioned in p. 22 do not give way to that quantity of mercury which we judge to be fufficient for the fafety of the conftitution, we fometimes find that they may be removed by blifters applied directly to the parts affected, and anointing them with æther, anodyne balfam, or volatile liniment.

For the removal of thefe pains we are often obliged to have recourfe to opium. In fufficient dofes it feldom fails by itfelf, but it proves more effectual in every variety of pain when given in the form of Dover's powder. Ten or twelve grains of the powder given at bed-time, and continued for feven or eight nights fucceffively, very commonly affords effectual relief.

The irritability, reftleffnefs, and atrophy to which venereal patients are not unfrequently liable, are often difficult to remove, and fometimes even prove fatal. I have known different inftances of thefe fymptoms proving incurable where ulcers and other fymptoms of the difeafe with which they were at firft connected were eafily removed, but where the patient by conftant reftleffnefs and anxiety, having firft been deprived of his appetite, and afterwards of ftrength, was at laft carried off, notwithftanding all the means that could be employed for his fafety.

I judge that thefe fymptoms are in many inftances altogether venereal, from obferving them accompanying other well-marked fymptoms of the difeafe, and from mercury being the only remedy that has any influence in removing them. Even mercury will not always fucceed; but in various inftances I have known it prove effectual where every other remedy had previoufly been tried in vain. Peruvian bark, a change of diet, and country air, are com-

monly prescribed; but we may readily conclude that no material advantage can result from them if the mercurial course be not also continued till the virus is eradicated.

This relieves anxiety to which syphilitic patients are occasionally liable, is in some instances very effectually removed by opiates, while in others these remedies rather do harm. The only course that I have found to prove useful, is, a light, nourishing diet, a due continuance of mercury, and the patient, during the time of using it, being allowed to go daily abroad in a carriage when the weather is not cold or damp.

In the use of mercury for the cure of this symptom the greatest nicety and care are required; for in the delicacy of constitution which prevails here it constantly does harm, if not managed with much attention. It cannot be given in large doses but with much risk of doing harm; nor can it be laid altogether aside without the disease gaining ground. If ever an alterative course of mercury, as it is termed, is proper for any of the symptoms in the more advanced stages of syphilis, it is here. By a regular exhibition of small doses of mercury the virus may be kept moderate till the strength of the system is so far restored by attention to regimen as to admit of larger quantities being given.

The most frequent anomalous symptoms in this disease is fever. It is often the effect of some evident symptom, such as bubo, ulcer, or node. In such cases the cause is obvious, and the fever disappears along with the symptom by which it was induced. But where a quantity of mercury sufficient for eradicating the disease has not been given, although all the symptoms for which it was employed may be removed, yet fever will sometimes take place, and in some instances subsist for a considerable length of time before any external mark of the disease is perceived. This I know is doubted, and even denied by many; but I have met with it frequently, and in some instances distinguished in the most obvious manner. In some where from the history of the case the cause was evident, the patient has been cured by an additional

courſe of mercury while in others, from no cauſe of ſuſpicion being mentioned, the febrile ſymptoms reſiſted all the uſual remedies, and were not removed at laſt till the appearance of nodes, ulcers, or ſome other local ſymptom has pointed out the neceſſity of a farther proſecution of mercury.

The effect of mercury upon this fever is often remarkable. In almoſt every other ſituation it is one of the firſt effects of mercury in a certain degree to accelerate the circulation of the blood, while here it not only leſſens the quickneſs of pulſe, but abates every other febrile ſymptom. Even in ſmall quantities mercury proves uſeful here, as it evidently does in the ſymptom laſt mentioned; and as the ſtrength of the patient is commonly much exhauſted before this remedy is employed it ſhould not at firſt be given in larger quantities than is merely neceſſary for mitigating the ſymptoms. This, however, not being ſufficient to render the conſtitution ſafe againſt future returns of the diſeaſe, care ſhould be taken that a ſufficient quantity of the medicine is exhibited as ſoon as the patient's ſtrength, reſtored by a nouriſhing diet, enables him to bear it.

SECT. VI.

Of Lues Venerea in Infants.

NO period of life is exempted from the ravages of the venereal diſeaſe. They are frequently to be deplored even in infancy, and here the ſame ſymptoms appear as in a patient of more advanced years; that is, when the virus enters the ſyſtem in the uſual way from the ſurface of the body, the ſymptoms which enſue are nearly or entirely the ſame as in other periods of life: but when the diſorder is communicated to the fœtus in utero, ſome variety is obſerved which demand particular notice.

We have already indeed had occaſion to remark, that it has been doubted whether Lues Venerea can be communicated to the fœtus in utero. Nay, of late it has been aſſerted that it cannot, and that practitioners upon this very important point have hitherto been miſtaken. But this is ſo contrary to general experience, and to the reſult of my own obſervation, that I cannot conſider it as an opinion that will ever gain ground where the judgment is not entirely warped. A deſire to ſupport a particular theory ſeems to have laid the foundation of this doctrine; but the facts which militate againſt it are too ſtrong and too numerous to admit of being eaſily ſet aſide*.

Thoſe who are of opinion that neither the blood nor any of the ſecretions of a ſyphilitic patient can communicate the contagion, alledge, that when a child appears to have been infected in utero, the infection muſt have been communicated during labour from venereal ſores in the genitals of the mother.

That this in ſome inſtances happens there is no reaſon to doubt. A child paſſing over, and perhaps reſting for a conſiderable time upon ſores of this kind, may readily be infected in this manner, and this may probably be the caſe in moſt of thoſe inſtances where the diſeaſe does not appear till two or three weeks after birth. But where a child is inſtantly upon delivery found to be covered with a venereal eruption, and which I have met with in various inſtances, the infection muſt neceſſarily have been communicated a conſiderable time before birth. It may be aſked, however, in what manner eruptions appearing on the birth of a child have been known to be venereal? In anſwer I may obſerve, that it has been aſcertained in the moſt obvious manner, by finding on enquiry that the father had been poxed without taking ſuch a quantity of mercury as was neceſſary to eradicate the virus: by the eruption upon the child being exactly ſimilar

* Even Mr. Hunter has unguardedly fallen into this error; and as his authority would neceſſarily have influence with thoſe whoſe opportunities for obſervation are not ſo great, I think it right, in a matter of ſuch practical importance to endeavour to render the miſtake obvious: ſee different parts of Mr. Hunter's Treatiſe.

to what experience in other inſtances ſhews to be venereal; by a child in this ſituation giving the different ſymptoms of Lues Venerea, evidently and ſtrongly marked, to the nurſe by whom it has been ſuckled; by the nurſe giving the diſeaſe in the firſt place to another child, and afterwards to her huſband, and by the diſeaſe in all of them being cured by a proper uſe of mercury alone, while no other remedy is of any avail.

Every practitioner muſt have met with inſtances of this. I have ſeen many, in ſome of which no external mark of the diſeaſe appeared either in the father or mother, although one or other of them, and in ſome caſes both, muſt have been infected. I conclude that we have ſufficient evidence of this where the ſame parents produce one, two, or more pocky children, and continue to do ſo till both paſs through a complete courſe of mercury; and hence, notwithſtanding any theoritical opinion that may be advanced to the contrary, I have much reaſon to imagine that the opinion which I have elſewhere given, that the ſemen of a diſeaſed parent will give a pocky offſpring is well founded. No perſon, I believe, will doubt of other diſeaſes being communicated in this manner. We have daily proofs of it in gout, pthiſis, ſcrophula, and, perhaps, in ſome others, in which theſe diſeaſes deſcend from fathers to their children, while no infection is communicated to the mother; and I have met with very deciſive evidence of it in Lues Venerea, at leaſt with ſuch as leaves no room with me for doubt.

About ten years ago I was deſired to viſit a child ſeven or eight days old. It was covered with a raſh, which had much the appearance of being venerea; and finding that the only other child which the parents ever had was born with a ſimilar raſh, of which it died, I enquired of the father of the child whether there was any cauſe to ſuſpect that he was infected or not. He informed me that he had been poxed about ſix months before his marriage; that his ſymptoms were chancres and a ſore throat; but that having taken as much mercury as was judged to be ſufficient, the ſymptoms having diſappeared while under the courſe,

and none of them having ever occurred again, although he had now been married nearly three years, he could not poſſibly believe that the child was infected with this diſeaſe, particularly as no ſymptom had appeared upon his wife. I was clearly of opinion, however, that the child was infected; and I judged it right to ſay, not only that the child ſhould inſtantly get mercury, but that he and his wife ſhould alſo take it, with a view to prevent the ſame occurrence with any other children which they might have, as well as to render themſelves ſafe. He agreed to this with reſpect to himſelf, but on account of the ſuſpicion which it might create, he would by no means conſent that it ſhould be given to his wife. Imperfect as this meaſure might be I was obliged to adopt it. Small doſes of calomel were given to the child, and the father was kept under a complete courſe of mercury, with unction and the blue mercurial pill, for the ſpace of ten weeks. The child got well; and although the ſame parents have had ſeveral other children ſince that period, all of them have been perfectly ſound. Some doubt, however, might ſtill have remained of the real nature of this raſh, but it happened that a very deciſive, although unfortunate proof was given of its being venereal. Two nurſes were infected by the ſuckling of this child. The firſt became ſo much diſtreſſed with ulcers upon her nipples, and pains in one of the mammæ, that ſhe was obliged to leave the family, and although warned of her ſituation, and of the neceſſity of giving no ſuck to other children till the courſe of mercury which ſhe was put under was finiſhed, ſhe fooliſhly took home her own child, which ſhe had previouſly given out, and in the courſe of two or three weeks he alſo was poxed, and being a weakly child, he ſoon died, although the greateſt care was taken of him. The nipples of the other nurſe ulcerated, and ſhe was ſoon thereafter ſeized with a venereal ulcer in the throat, for which a courſe of mercury became neceſſary. Since that period, beſides ſome inſtances in which the diſeaſe was given to children, where there was much reaſon to think that both parents were infected, I have met with other two caſes very ſimilar to that which I have mentioned, in which a mercurial courſe given to the father proved ſo completely ſucceſsful that all the children of both fa-

milies that have been born ſince that time have been entirely healthy, although one of them had previouſly loſt two and the other one from their not having entertained any ſuſpicion of the nature of the diſeaſe.

Theſe, as well as various other facts which I might adduce, render it obvious to me that Lues Venerea may be, and frequently is, communicated in the manner I have mentioned; that is, by the infection paſſing directly from parents to children, and where no marks of diſeaſe appear either upon father or mother. Nor would I have judged it neceſſary to have entered ſo fully into the ſubject, as by many the opinion I am endeavouring to eſtabliſh will be admitted, had it not been with a view to put the younger part of the profeſſion upon their guard, till by experience they are enabled to judge for themſelves of the diſtreſsful conſequences that would frequently reſult from the oppoſite doctrine being admitted.

Among other baneful effects of ſyphilis, perhaps none prove more diſtreſsful than the frequent abortions which it evidently occaſions. A child infected in the uterus will in ſome inſtances not come away till the full time; but in a great proportion of caſes abortion takes place in the ſixth or ſeventh month, ſometimes ſooner, but moſt frequently about the middle of the ſeventh month. Of this I have met with ſuch a number of inſtances, that I am induced to conſider it as one of the moſt frequent cauſes of abortion; but as the child is commonly either born dead, or ſo weakly that it ſoon dies, ſufficient evidence is not often obtained to lead the attendants to entertain any ſuſpicion. Hence practitioners ſeldom hear of it unleſs the diſeaſe has made greater progreſs than uſual. We have it in our power, however, when this cauſe of abortion is diſcovered, to remove it with much certainty. A well-conducted courſe of mercury very ſeldom fails to prove effectual. I have now met with a conſiderable number of inſtances where abortion had regularly taken place in the ſixth, ſeventh, or eighth month, and in which, from there being no mark of diſeaſe either upon the father or mother, the real cauſe of it remained concealed; but which being at laſt diſcovered, either by ſome of the children being clearly marked with the diſeaſe, or from its breaking out in an obvious form on

one or both of the parents, a mercurial courſe has at laſt been preſcribed, and in no inſtance has it failed where a ſufficient quantity of the medicine has been given. In two inſtances it did not anſwer ſo completely as in the others, but in both there was ſufficient evidence of too little mercury having been employed; for the children in both inſtances were kept till the beginning of the ninth month, which in the one was two months, and in the other ſix weeks later than had been the caſe before, and both the parents having in each of theſe inſtances been made to take mercury again, and in greater quantities than before, no abortion has ſince taken place, and each family has within theſe few years had ſeveral healthy children.

At whatever period children with this infection are born they are remarkably weak and delicate. The muſcles over the whole body are flaccid, and the joints have not that firmneſs which they ought to poſſeſs. When the diſeaſe is diſcovered immediately upon the birth of the child, it is uſually in the form of an eryſipelatous efflorescence over the whole body. In ſome inſtances the cuticle is either altogether or in part deſtroyed, and the ſkin is tender, and affords a kind of matter. In others the nails have not formed either on the fingers or toes.

Sometimes again no mark of diſeaſe will be perceived till the tenth, twelfth, or even fourteeth day after delivery; and in ſuch caſes the eruption occurs chiefly about the anus, on the nates, and about the pudendum. In theſe places irregular blotches ariſe, of a light ſtrawberry colour, and ſomewhat elevated above the contiguous ſurface. Although a thin acrid ſerum in ſome inſtances oozes from them, if not prevented by a timeous exhibition of mercury, the diſeaſe is apt to ſpread quickly over the whole body; but excepting in the parts which I have mentioned, it uſually appears in the form of a cruſty eruption, which in ſome caſes is dry, and falls off in ſmall ſcales, while in others it is kept together by the exſudation of a viſcid matter, particularly upon the forehead, eye-lids, arms, and breaſt.

I have already had occaſion to obſerve, that in ſupporting a favourite theory ſome have denied that the fœtus in utero ever receives this diſeaſe from the parents, and af-

fert, that wherever it occurs in new-born children they muſt have received it from the mother in the time of delivery. But while the fallacy of this opinion is rendered obvious, as we have juſt had occaſion to obſerve from the fœtus being in many inſtances perceived directly after birth to be covered with a venereal efflorescence, we alſo find that the ſyphilitic virus is in this ſtate of a more diſeterious nature than it ever appears to be in any other form of the diſeaſe. Beſides, being more particularly apt to communicate the infection, it proceeds with more rapidity to deſtroy the conſtitution, inſomuch, that if mercury be not employed immediately on the diſeaſe being perceived, it uſually makes ſuch quick progreſs that a fatal termination can ſcarcely be afterwards prevented.

In all ſuch circumſtances the child ought to be nurſed by the mother; and as mercury is neceſſary for both, they ſhould both be put immediately under it. As it has been found that a diſeaſed child may be cured by ſucking the milk of a woman under mercury, ſome have adviſed that new-born children ſhould always be treated in this manner. But I can ſay from experience, that it is not to be truſted. In ſome inſtances this practice will no doubt ſucceed. In all it will perhaps accompliſh a temporary removal of the ſymptoms, but for the moſt part they return again, or the diſeaſe breaks out in ſome other form. At the ſame time, therefore, that the mother begins to take mercury, it ought to be given to the child, and it may be done with no inconveniency; for even at this early period it excites leſs diſtreſs than it uſually does afterwards. The cauſe of this may be difficult to aſſign; but I have in various inſtances found that mercury in early infancy, is not ſo apt to excite either ſalivation or violent effects upon the ſtomach and bowels as it afterwards does, and that it may be given with ſafety in ſufficient quantities for curing the diſeaſe. Calomel is often employed for this purpoſe. The doſe ſhould be the fourth or fifth part of a grain three times a-day, and when rubbed with a ſmall quantity of ſugar, the child takes it eaſily. Mercurius alkaliſatus is a preparation that anſwers particularly well in the doſe of half a grain three times a-day; and I ſometimes employ the common blue pill prepared with triturated quick-ſilver. A pill contain-

ing a grain of mercury, being rubbed into a powder, and divided into four, one of theſe is given evening and morning. Any of theſe being continued for the ſpace of a month, will, in moſt inſtances, remove every appearance of the diſeaſe; but a complete cure will not be accompliſhed if the uſe of the medicine is not perſiſted in for a conſiderable time thereafter. When the child is healthy, and not of a delicate form, this ſhould be done with no interruption, otherwiſe it may be laid aſide occaſionally for eight or ten days together; but upon the whole, it ſhould be given for the ſpace of fifteen or ſixteen weeks, and never diſcontinued ſo long at once as to allow the effects of the mercury upon the ſyſtem to be entirely gone at any one time.

When a child in this ſituation cannot be ſuckled by its mother, either from her want of milk or any other cauſe, what are we to do? Another nurſe is commonly procured; but this reſource ought never to be adopted, for it ſeldom fails of giving the diſeaſe in the moſt virulent form to whoever is ſo unfortunate as to be employed for this purpoſe. All ſuch children ought to be nouriſhed and brought up on ſpoon meat, nor ſhould the reſtriction be confined to the firſt weeks of infancy only. No child infected in this manner ſhould be put to the breaſt of a ſound nurſe till a courſe of mercury has been continued for three months at leaſt after every external mark of the diſeaſe is gone. In one inſtance, where a child in this ſituation had for ſeven weeks been nurſed by the mother, and where mercury had been regularly continued for the ſpace of three weeks after every external mark of the diſeaſe had diſappeared two different nurſes were infected, who were employed to ſuckle the child during a temporary fever with which the mother was attacked. And in another the diſeaſe was given in the ſame manner where the child was three months old, and where every ſymptom of ſyphilis had diſappeared upwards of eight weeks. Hence I conclude that the greateſt attention is required for preventing ſimilar occurrences, and that nothing will prove effectual but a regular and long-continued uſe of mercury.

In addition to what I have already ſaid on the ſubject of ſyphilis producing abortion, I may obſerve, that when a woman has ſuffered one or more abortions, and has reaſon

to think that they proceed from venereal infection, ſhe, as well as her huſband, ſhould immediately be put under mercury. It is a prevailing opinion that mercury is apt to occaſion abortion, and it is therefore ſeldom given during pregnancy. Much experience, however, has convinced me that this opinion is not well founded, and, when managed with caution, that it may be given in ſufficient quantities at every period of pregnancy, for curing every ſymptom of ſyphilis, and without doing the leaſt injury either to the mother or child. We would not indeed from choice give mercury during pregnancy; but when a woman in this ſtate is evidently poxed, or when there is good reaſon to think that ſhe is ſo, I would not heſitate to adviſe a courſe of mercury. In different inſtances I have done ſo, and always with much advantage. Where obvious ſymptoms of Lues Venerea break out during pregnancy ſcarcely any will doubt of the neceſſity of giving mercury, but ſome explanation may be required for adviſing it to be given where there is only ground of ſuſpicion.

In illuſtration of the propriety of this, the following, among ſeveral caſes, may be recited. Five years ago I viſited a lady in the fourth month of pregnancy, on account of a ſimple fracture of the os humeri. The patient being young and healthy I prognoſticated a ſpeedy cure. She had been married four years, and had ſuffered two abortions, one in the ſixth, the other in the ſeventh month, and her friends were anxious leſt this accident ſhould produce the loſs of another child. This induced me to enquire into the circumſtances attending the previous abortions, when I found that both children were born dead, and entirely deſtitute of nails and cuticle. No obvious ſymptom of ſyphilis had appeared upon the parents, but the huſband had occaſionally been attacked with a dry ſcaly eruption upon the breaſt and ſhoulders. I alſo diſcovered that he laboured under the venereal diſeaſe a few months before marriage; and it did not appear to me that he had taken mercury either with the regularity or to the extent neceſſary for removing the ſymptoms which took place. This led me at once to ſay that both he and his wife ſhould immediately undergo a complete courſe of mercury. To this they ſubmitted, and in leſs than a year from the com-

mencement of the courſe the latter was delivered of a healthy child. Now here was only ground for ſuſpicion; but the event gave cauſe to imagine that if this kind of proof was to be ſet aſide where direct evidence cannot be procured, and which often happens in caſes of this kind, many conſtitutions would be irreparably injured, and many children loſt which otherwiſe might be ſaved.

During pregnancy mercury ought in every inſtance to be uſed in the form of unction, as we thereby with moſt certainty prevent it from acting upon the ſtomach and bowels, and thus avoid the hazard of abortion taking place as the effect of irritation upon theſe parts.

Nothing indeed more readily excites abortion than purgatives, when ſevere in their operation upon the bowels, or when they even only produce any conſiderable degree of teneſmus; and as the internal exhibition of mercury is frequently the cauſe of this, it cannot but with much hazard be given in any conſiderable quantity during pregnancy.

SECT. VII.

Of ſome Peculiarities of Form under which Lues Venerea has appeared in Scotland and Canada.

I HAVE already had occaſion to remark that this diſeaſe has appeared with ſome peculiarities both in Scotland and in Canada. By the accounts received of it from Canada it ſeems to have appeared in that country in the ſame manner, and under the ſame form as it had a conſiderable time before done in Scotland; and as few have had more opportunities of ſeeing it here than I have had, I mean to give a ſhort deſcription of the appearances which it exhibits, and to mention the method of cure which hitherto has been found moſt effectual.

In the Highlands of Scotland this diſeaſe is uſually termed ſivvens or ſibbens: In Dumfries ſhire and Galloway it is commonly called the yaws, from a reſemblance which it

is ſuppoſed to bear to the African and Weſt Indian diſeaſe of that name; but over the whole kingdom it is known to be the venereal diſeaſe. That this is ſo is certain from thoſe afflicted with it in every diſtrict where it has yet appeared having been able to trace it to ſuch an origin as left no room for doubt, as well as from the ſymptoms which take place in it bearing an exact reſemblance to thoſe of the later ſtages of Lues Venerea in the ordinary form of the diſeaſe, and from mercury being the only remedy upon which we can place any dependence for a radical cure.

It never appears, as I have elſewhere had occaſion to obſerve, in the form of Gonorrhœa, nor ſeldom at firſt in any form upon the genitals, owing to the manner in which it is moſt frequently communicated. The infection being for the moſt part received by eating or drinking out of the ſame utenſils with thoſe labouring under the diſeaſe, it often appears at firſt in the throat or ſome part of the mouth. In the mouth the ſores have the uſual appearances of venereal ulcers. This is likewiſe the caſe in the throat when the diſeaſe has been of ſome duration; but at firſt, and often for the ſpace of ſeveral weeks, although the patient complains of a good deal of uneaſineſs in ſwallowing, and of a conſtant hoarſeneſs, there is nothing perceived upon inſpection but a degree of tenderneſs accompanied with an eryſipelatous redneſs of the amygdalæ, uvula, and velum pendulum palati. If not prevented, however, by the uſe of mercury, ulcers at laſt form upon theſe parts, and commonly ſpread more quickly than venereal ulcers uſually do in other parts of the body; inſomuch that the uvula and amygdalæ will ſometimes be entirely deſtroyed in the courſe of a few days, and a degree of hoarſeneſs and loſs of voice produced, from which the patient never afterwards recovers.

It is particularly apt to affect the internal parts of the noſe; and when the ſores penetrate to the oſſa ſpongioſa theſe ſoon become carious, and come away in ſmall pieces along with the matter, which is always exceedingly fœtid. When not prevented by mercury the ulcers ſpread to the hard bones of the noſe, and from theſe to the bones of the cheeks. In this manner the whole face becomes ulcerated, for when theſe bones are affected the contiguous ſoft

parts likewiſe become ſoon diſeaſed. It is not uncommon for theſe ulcers to attack the eye-lids.

When the infection is not received by the mouth the diſeaſe appears in a variety of forms in different parts of the ſurface of the body. When the virus has entered the ſyſtem the parts upon which it firſt commonly breaks out are the genitals, the parts contiguous to the anus, the anterior parts of the thighs and legs, the under part of the abdomen, the breaſt, arms, fingers, and toes, and hairy ſcalp. It does not ſo readily fix upon the fleſhy parts of the legs or thighs, or on the back. In ſome the parts become covered with an infinite number of ſmall puſtules, and, as they are itchy, the diſeaſe is at firſt often miſtaken for itch. This happens the more readily from its prevailing almoſt entirely among the common people, who, from want of cleanlineſs, frequently labour under itch; and ſo much is ſibbens confined to this ſet of people, that excepting children, who are more particularly expoſed to receive infection from ſervants, thoſe in the higher ranks of life are ſcarcely ever attacked with it, at leaſt few inſtances of their being ſo have fallen within my obſervation.

This eruption, however, ſoon aſſumes appearances which ſufficiently diſtinguiſh it from itch. The ſkin upon which it is ſeated becomes thickened and ſomewhat elevated, and acquires the characteriſtic mark of venereal blotches, a peculiar copper-colour appearance.

The late Doctor Gilchriſt of Dumfries, in a paper upon this ſubject, in the Phyſical and Literary Eſſays of Edinburgh, remarks, "that theſe ſcabby eruptions are often met with on the ſcalp, forehead, inſide of the thighs, groins, and parts contiguous. Inflammation and excreſcences about the fundament are frequent; and it ſometimes appears in the form of a herpes exedens, healing in one part and breaking out in another."

Some have ſmall tubercles, or hard elevated knots upon the face, arms, and breaſt, ſomewhat reſembling ſmall pox at the height, but of a red or copper-colour, and accompanied with a painful degree of heat. If

mercury is given early these tumours gradually subside, otherwise they become large and discharge a fœtid viscid matter, which forms into crusts or flakes, and on their falling off, the parts beneath are red, tender, and in some cases in a state of ulceration.

Instead of this more numerous eruption some are attacked with small inflammatory boils, which do not readily suppurate, but remain for a considerable time hard and of a copper-colour, and at last discharge a thin bloody ichor. These at first resemble the common anthrax or carbuncle, but soon after bursting they assume all the appearances of the true venereal ulcer.

But the most characteristic symptom of this variety of syphilis is a soft spongy excrescence, in size and colour resembling a common rasp, which is apt to appear on all such parts as either become ulcerated, or that are attacked with any kind of eruption; sivven or sibben being in many parts of the Highlands the name of a wild rasp, and this being a very frequent symptom of the disease, is the cause of its being distinguished by this appellation. In some instances this spongy substance rises to a considerable height, nor can it be kept down by any of the common escharrotics; for although entirely removed, if the virus of the disease be not eradicated by the use of a full course of mercury, it soon returns to a greater extent than before; but as mercury is commonly given as soon as this symptom becomes evidently marked, the excrescence is seldom so much elevated as it otherwise would be.

These fungous productions are occasionally met with in every part of the body; but they are particularly apt to form on such parts as have become tender whether from previous eruption or from the cuticle having separated and come off from the skin beneath; a circumstance which sometimes takes place in this disease, and when to any considerable extent, always with much inconvenience and distress.

In the treatise which I have mentioned Doctor Gilchrist observes that this disease does not attack the large and solid bones, and very rarely any of the others.

I have however ſeen ſeveral inſtances of the contrary, in which both the bones of the legs and arms have been affected; and it is by no means uncommon to find this diſeaſe fix upon the bones of the head. I have ſeen it indeed in every part of the body, and in every form under which Lues Venerea uſually appears, except in chancres upon the genitals. I have ſeen it produce ſores reſembling chancres upon the lips and on the nipples of nurſes; and where an infection has been of long duration I have known ulcers form upon the penis, but I have not known an inſtance of its producing chancres either in men or women from contagion, owing, I imagine, to all who are attacked with ulcers upon theſe parts from this cauſe avoiding venereal intercourſes, which they very univerſally do till a cure is obtained by a courſe of mercury; but although ſibbens is not uſually met with in the form of chancres upon the penis, this, as well as other parts of the genitals, are particularly apt to be attacked with ſuch ulcers as appear from the virus having entered the conſtitution. In different inſtances I have known the whole penis and ſcrotum deſtroyed with it, but this has commonly happened from the patient having neglected too long to call for medical aſſiſtance, or from mercury being given in too ſmall quantities.

Theſe ulcers, like the uſual form of venereal ulcers proceeding from the conſtitutional form of the diſeaſe, do not commonly produce buboes. This, however, is not univerſal; for buboes ſometimes take place in ſibbens, not only from the primary ulcers of the diſeaſe, as I have in more than one inſtance perceived in the arm-pit from ſores produced upon the nipple in nurſing an infected child, but alſo from thoſe which appear upon the penis and other parts of the genitals from the virus having entered the ſyſtem, and the appearance of buboes produced by ſibbens, whether in their ſwelled or ulcerated ſtates, is in every reſpect the ſame with that of the ordinary form of venereal bubo.

Syphilis, in whatever way the infection is communicated, is readily tranſmitted, as we have already had occaſion to ſee, from parents to the fœtus in utero, and

this is particularly apt to happen in ſibbens. Sibbens therefore proves a frequent cauſe of abortions, although in ſome inſtances children are born with it at the full time, and in a few it breaks out in the courſe of the firſt month after delivery.

In the treatment of ſibbens, as of every variety of Lues Venerea, mercury is the only remedy upon which we can place dependence. Sarſaparilla, guiacum, and mezereon have occaſionally proved uſeful, but we truſt to mercury alone for a radical cure. The obſervations we have already had occaſion to offer on the employment of mercury apply with equal propriety to the treatment of every ſymptom of ſibbens. It is therefore unneceſſary to conſider the ſubject farther at preſent; but while we refer for this purpoſe to different parts of the preceding ſections, I think it right to obſerve, that a greater quantity of mercury is in moſt inſtances required for the cure of ſibbens than we uſually find to be neceſſary in the ordinary form of the diſeaſe. Relief is obtained with perhaps equal eaſe, and a ſtop may be put to the farther progreſs of the diſeaſe by the ſame quantity that we employ for the common ſymptoms of pox, but it is more apt to return if the medicine be not given in larger quantities, and continued for a conſiderable time after every appearance of infection is removed. When the diſeaſe has been of long duration mercury ought to be continued for ſeven or eight weeks after every ſymptom has diſappeared.

A practitioner of experience and obſervation, and who had many opportunities of ſeeing every ſymptom of ſibbens, informed me that mercurius ſublimatus corroſivus frequently proves ſucceſsful in the cure of the more inveterate ſymptoms of the diſeaſe when the milder preparations of mercury fail. He gave it in the form of drops. Sixteen grains were diſſolved in an ounce of water with the addition of eight grains of crude ſal ammoniac, and of this ten drops were given three or four times a-day.

When ulcers in the throat and other parts do not readily yield to the uſe of mercury, we have recourſe

to cauſtic and eſcharrotics, and they prove equally uſeful here as in every variety of ſore proceeding from Lues Venerea. In various inſtances they have been rendered clean and brought into a healing condition by fumigating with cinnabar, when they had previouſly reſiſted every other remedy.

The public, however, are equally intereſted in the prevention of this diſeaſe as in the cure of it, particularly in thoſe diſtricts where it has long prevailed, and with proper attention there is much reaſon to ſuppoſe that it might ſoon be eradicated. In ſome parts of Scotland this has already indeed been accompliſhed, and the means by which it has been done are ſimple, and eaſily practiſed. They conſiſt entirely in a due attention to cleanlineſs and in preventing nurſes and other ſervants from being employed where there is the leaſt reaſon to imagine that they are infected. In the choice of a nurſe this is a point of the utmoſt importance; for in ſibbens, as in every other form of ſyphilis, I have had many proofs of the diſeaſe being communicated by the milk alone, and as this is almoſt the only way by which it has found acceſs to families of rank, they are particularly intereſted in preventing it.

The chief difficulty which occurs to the prevention of this diſeaſe proceeds from thoſe who ought moſt anxiouſly to wiſh for it. The infected are ſo much afraid of a diſcovery being made to injure their reputation that they do all in their power to conceal it, by which they are often prevented from taking mercury in that complete manner by which alone a cure can be accompliſhed. I know, however, that this anxiety for concealment may be removed, and, with proper attention, that thoſe poor people who otherwiſe would fall victims to the baneful effects of the diſeaſe may be eaſily induced to apply for medical aſſiſtance. The clergy have this ſo much in their power, that through their interference the ſibbens might ſoon be eradicated. In one pariſh this was actually done. The diſeaſe had ſpread to ſuch an alarming height that more than three-fourths of the inhabit-

ants were infected, and many of the more delicate, particularly young children and females, died under it. This had gone on for many years, when by the exertions of the clergyman of the parish it was entirely removed in the course of a short time. He went personally to every individual of his parish and convinced them of the propriety of applying for medical assistance immediately on the disease breaking out, which they agreed to the more readily from their being sensible that all of them had got the disease in the most innocent manner. In this way it was soon carried off, and by due attention to cleanliness, and avoiding all kind of intercourse with those who they suspected to labour under it, the disease has now for a considerable time been entirely subdued. This has in some degree indeed been the case in every district of Scotland where sibbens ever prevailed. In some situations it has been nearly eradicated, and in none is it now so frequent as it was some years ago. There is much cause therefore to hope that by the superior attention to cleanliness, which of late years has prevailed among our common people, it will soon become every where unknown.

If the disease as it prevails in Canada is the same with the sibbens of Scotland, and from all that I have heard of it there is no cause to doubt of its being so, the same method of cure will prove effectual, and the same means of prevention must be observed.

SECT. VIII.

Of Prophylactics in Lues Venerea.

TO prevent infection is an object of the first importance in all diseases, but there is none in which our endeavours have proved less successful than in this. As the pleasures and safety of mankind are both interested,

Prophylactics in Lues Venerea have long been an object of attention; but hitherto, notwithstanding all the boasted specifics with which every kingdom of Europe abounds, nothing has been discovered upon which any dependance can be placed.

At first view one would not doubt of ablution alone proving sufficient for preventing infection. As the parts to which the matter of infection is applied are altogether external, and as a considerable length of time commonly elapses before any effects are produced by it, we might with confidence expect that bathing the parts in warm water, or any other liquid, could scarcely fail of removing the contagious matter. This, however, is not the case; for although some advantage may occasionally be derived from careful ablution we have daily proofs of its failure, even when practised with all manner of attention.

This must probably arise from the virus being either exceedingly subtile, or so very adhesive that it cannot be separated from parts to which it has found access by any means that have as yet been employed. In this view, therefore, two objects present themselves. Any application to be made use of should not only be of a very penetrating nature, but capable of destroying that connection by which the virus is thus made to adhere to the parts to which it is applied. I also think it probable that some advantage may be derived from combining mercury with whatever is best adapted to these purposes. By acting as an antidote it may serve to destroy such parts of the venereal poison as the others have not been able to remove.

Crude mercury, triturated with honey and with turpentine, and mixed with a sufficient quantity of water, has been used as a wash for this purpose; but the most convenient way of employing mercury here is in the form of a watery solution of corrosive sublimate. It may be used of various degrees of strength, from the quantity of one grain to three grains of mercury in the ounce of water. More than this proves irritating and corrosive.

As it is probable that the virus proves more adhesive than it otherwise would be by combining with the mu-

cus of the parts to which it is applied, all ſuch articles as prove ſolvents of mucus, or that in a more particular manner deſtroy its tenacity, may with propriety be employed in the compoſition of an antiſyphilitic waſh. Upon this principle lime-water may be uſed with advantage; alſo the cauſtic fixed alkali, and even the cauſtic volatile alkali ſo diluted with water as to admit of their being applied with ſafety.

No harm can enſue from the external uſe of any of theſe articles in the form of a waſh, and more advantage, I have reaſon to think, may be derived from them than is commonly obtained from the uſe of thoſe ſecret ſpecifics which the intereſt of individuals and credulity of our young people have occaſionally brought into notice. I think it right, however, again to remark, that none of them can with certainty be relied upon, and that in no inſtance ought any of them to be injected into the urethra, as preventatives of Gonorrhœa. When the diſeaſe has actually taken place, they may, when much diluted, be uſed with freedom; but they cannot be employed but with much riſk of inducing inflammation when of ſuch a ſtrength as can have any influence in diſlodging the virus, by diſſolving or deſtroying the mucus with which it is combined. Whether theſe ſpecifics to which I allude have any of the articles which I have mentioned for their baſis or not I cannot determine, but when uſed as injections they often do much harm by exciting pain, and ſuch a conſtant inclination to paſs urine as proves exceedingly diſtreſsful.

SECT. IX.

Of Lues Venerea as inducing other Diſeaſes.

AS the virus of ſyphilis is often difficult to eradicate, and the diſeaſe being frequently known to break out again long after a cure has been ſuppoſed to have been

accomplished, the fears of patients have induced them to suspect that it cannot with any certainty be removed after having appeared as a general disease of the system, and even to consider it as the cause of many other diseases.

Even practitioners have been divided in their opinions upon this. The result of my observation has already been given on the power of mercury in curing the disease. In section fourth of this chapter I have endeavoured to show that where failures have happened they must in a great measure have arisen either from the misconduct of patients when under mercury or from too small a quantity of the remedy being given. But while I am clearly of this opinion I at the same time think that Lues Venerea is often the cause of other diseases, which frequently prove fatal from want of a proper application of mercury, by which a cure of all of them might be easily obtained.

In the preceding parts of this work a description is given of all the ordinary symptoms of Lues Venerea, and of the method of treatment appropriated to each; but if the opinion which I am now endeavouring to support is well founded, this disease, it is evident, must occasionally appear under other forms.

We have already had occasion to observe that Lues Venerea, when not interrupted in its course by the use of mercury, usually makes a certain progress, and that the symptoms make their appearance with some regularity: But when mercury is employed, and not given in quantities sufficient for eradicating the virus, although all the symptoms may thereby be suspended, the disease will certainly appear either in the same or some other form at some future period. In this case the disease generally shows itself by one or other of the symptoms that have been described, but occasionally we meet with it under a variety of other appearances; the virus, instead of producing the ordinary symptoms of Lues Venerea, tending rather to induce other diseases.

This I know is denied by many, who allege that syphilis is never productive of other diseases; but I have met with it in such a number of instances, and these so evidently marked, that I consider the fact as certain. The

virus of ſyphilis will not produce any diſeaſe that depends upon a ſpecific contagion, ſuch as ſmall-pox, meaſles, itch, and ſome others, but I have much reaſon to think that a great variety of other diſeaſes are induced by it. It may be aſked in what manner can ſyphilis act in producing other diſeaſes, and what evidence can be given of its ever having done ſo? In anſwer to this I may obſerve, that it is often difficult, and ſometimes impoſſible, to explain the action of cauſes in producing diſeaſes. We may eaſily, however, ſuppoſe, where the virus of ſyphilis exiſts in the ſyſtem, but not in ſufficient force to ſhow itſelf by the uſual and more obvious ſymptoms of the diſeaſe, that it may, however in various inſtances be capable of exciting a great deal of derangement, and even many diſeaſes which otherwiſe might not take place, and that it will more eſpecially be apt to produce thoſe diſeaſes to which the conſtitution is prediſpoſed, or thoſe to which the patient is rendered liable by expoſure to particular occaſional cauſes. If the virus can exiſt in the ſyſtem for a conſiderable length of time without ſhewing any external mark of diſeaſe, and of this few I believe will doubt, it is difficult to conceive that it ſhould not produce both general derangement and particular organic affections; and accordingly I believe that it more frequently does ſo than we are uſually led to imagine. The evidence which I could give of this would be exceedingly ample, as I could relate a very extenſive collection of caſes in a great variety of diſeaſes in which it actually happened; but the extent of this publication renders it neceſſary to confine the proofs of it within narrower limits. The diſeaſes induced by the venereal virus, of which I ſhall give inſtances, are pthiſis, aſthma, rheumatiſm, dropſy, head-ach, epilepſy, and mania.

In the month of October 1783 I was deſired to viſit a gentleman at ſome diſtance from town, with an extenſive foul ulcer upon his left ſhoulder. This was mentioned as the moſt material part of his diſtreſs; but I alſo found that he had for ſeveral months laboured under all the moſt alarming ſymptoms of pthiſis, ſuch as ſevere cough, ſpitting of purulent matter, pains in the breaſt and ſides, night ſweats, quick pulſe, and an emaciated ſtate of the

body. Theſe ſymptoms, however, did not excite the attention of the patient nor of his friends ſo much as the ulcer upon his ſhoulder, which, from the great quantity of matter which it diſcharged, and the great length of time which it had endured, was conſidered as the cauſe of his weakneſs as well as of all the other ſymptoms.

The appearance of the ſore giving cauſe to think that it might be venereal, I mentioned this to the ſurgeon in attendance, as well as to my patient, with a view to diſcover whether from the hiſtory of the caſe, and from his previous courſe of life there was any ground for ſuſpicion. The anſwer which I received to this inquiry was, that ſoon after the firſt appearance of this ulcer, about three years before the time of my being conſulted, an ulcer had appeared in his throat, accompanied with ſome other ſymptoms of ſyphilis. For the removal of theſe he had been put under a long courſe of mercury, which had proved ſucceſsful; and as he had not ſince that period run any riſk of being infected he did not ſuppoſe it poſſible that the ulcer upon his ſhoulder, or any of his other ſymptoms could be venereal. Having found, however, that the mercury, although long continued, had never been given in greater quantities than to render the mouth moderately ſore, and that for a conſiderable time an eruption reſembling venereal blotches had prevailed over his breaſt and arms, I did not heſitate to ſay that the infection had not been eradicated, and that he ought immediately to enter upon a full courſe of mercury.

The chief objection to this was the debilitated ſtate of our patient, and the quickneſs of pulſe, with other ſymptoms of fever, which prevailed in a very conſiderable degree, the pulſe at this time beating upwards of 130 in a minute. Even theſe conſiderations, however, did not deter me from adviſing the uſe of mercury; having even at that time ſeen more than one caſe of a ſimilar nature, where the lungs were evidently affected, and in which a cure was obtained by mercury; and judging from the whole hiſtory of the caſe that the pthiſical ſymptoms might be kept up by the ſyphilitic virus, I obſerved to my patient, that if my conjecture was well founded, theſe ſymptoms, as

well as the others, would gradually abate on the mercury taking effect. I also said to his friends, that in such circumstances the mercury could not add much to his hazard, however severely it might operate; the nature and severity of his symptoms being such as gave no cause to imagine that he could live above a few weeks if some unexpected alteration did not take place.

The patient himself having readily acquiesced a course of mercury was immediately prescribed. At first he rubbed in a drachm of strong mercurial ointment every evening. This came to be repeated morning and evening; and as his cough and fever were not increased by it, and the state of his mouth enabling him to bear it, the quantity at each application was increased at the end of eight days to a drachm and a half. The ulcer was dressed with common wax ointment. About the end of a fortnight it became clean, which it had never before been, and any uneasiness with which it had previously been accompanied was now removed. The blotches upon his skin had begun to yield, and even the febrile symptoms, instead of being increased by the mercury, were somewhat abated. His mouth became exceedingly sore; but although a good deal of salivation was excited the same quantity of mercury was continued. This I was induced to insist upon from our having now very satisfactory evidence of all his symptoms being venereal, for even the cough and purulent expectoration became moderate in proportion to the quantity of mercury that was exhibited. By the end of the sixth week the cough was nearly gone; the blotches were almost entirely removed; the ulcer continued perfectly clean and much contracted, and his pulse did not now beat above ninety strokes in a minute.

In the course of a fortnight from this time, that is, after he had taken mercury for the space of eight weeks, scarcely any remains of the blotches could be perceived: The sore was reduced to the fourth part of its original extent; but about this period it became nearly stationary, for which it was touched every second or third day with lunar caustic. At the end of another fortnight it was completely cicatrised; but the infection having been of long duration, I judged it proper to continue the mercury three weeks lon-

ger, being thirteen weeks in all. He had now been many weeks entirely free of cough. His pulſe was about its natural ſtandard; and as he had been allowed nouriſhing diet during the whole courſe, he was even conſiderably improved in appearance and ſtrength. By the beginning of the enſuing ſummer he was equally ſtrong as he had ever been at any period, and when I laſt ſaw him, about three years ago, he had continued entirely free both of Lues Venerea and pthiſis.

In the beginning of January 1784 I was deſired to viſit a patient newly come to town, with ſores on different parts of his body and limbs, and he had alſo for a conſiderable time been diſtreſſed with aſthma. It was chiefly however for the ſores that he applied for advice, as he had been led to conſider aſthma as a diſeaſe for which there was no remedy. There was one large ulcer immediately above the great trochanter of the right thigh; one upon the middle and moſt prominent part of each leg, both of which penetrated to the tibia; one upon the breaſt, where the ſternum appeared to be thickened, although not carious; one upon the right ſide, upon the ſeventh and eighth ribs; and a ſmall ſinous ulcer upon the middle and outſide of the right arm, which, upon probing, was found to run to the ſurface of the ulna, which was rough for the ſpace of an inch. Beſides theſe there were ſeveral ſmall ulcers upon the toes of both feet. Theſe, as well as the others, were all foul, and diſcharged a thin, fœtid matter; and being accompanied with that eryſipelatous kind of redneſs which frequently ſurrounds the margins of venereal ulcers, I was thereby led to ſuſpect them to be of a venereal nature. The patient mentioned, as reaſons for thinking that I was miſtaken, that theſe ulcers were now of ſeven years continuance, and on the ſuſpicion of their being venereal that he had taken mercury to a conſiderable extent at three different times, each courſe having been continued for nine or ten weeks; and although he had from all the three derived benefit, that none of the ſores had healed by the effects of any of them, and that ſome of them had even become worſe ſoon after the laſt courſe of mercury was left off. The aſthmatic ſymptoms were now of five years duration. They began without any obvious cauſe, and had gradually become

more violent, nor had any remedy that had been employed for them given him relief, excepting opium, and even this was merely temporary. Beſides a conſtant difficult breathing, he was liable to periodical attacks of a more ſevere nature, which occaſionally came to ſuch a height as to endanger ſuffocation. Theſe occurred moſt frequently during ſleep, and, for the moſt part, with much regularity, about three o'clock in the morning.

The patient, who was now about forty-five years of age, acknowledged that in his earlier years he had ſuffered much from Lues Venerea, but having been led to ſuppoſe that he had already taken more mercury than was neceſſary, it was with difficulty that I perſuaded him to enter upon a farther courſe of it. The more, however, that I heard of the riſe and progreſs of his complaints the more I was convinced of their being venereal; for beſides the appearances of the ſores which I have mentioned, I found upon enquiry that he had never taken a full courſe of mercury, for although it had always rendered his gums ſore, he had never uſed it in ſuch quantities as to require confinement. Neither had any of the attempts which had been made to cure the ſores by external applications proved ſucceſsful. A great variety had been employed, but although ſome of theſe had rendered them more clean than they had been before, and procured a diſcharge of better matter, no permanent advantage had been derived from any of them.

Theſe conſiderations determined me to give a deciſive opinion on the propriety of his taking mercury in larger quantities than he had ever as yet done. This induced him to agree to it, and he entered upon the courſe on the 14th of January. At firſt he rubbed in a drachm of mercurial ointment every night, and took one of the blue pills evening and morning. In the courſe of eight days he uſed two drachms of the ointment daily, and the ſame number of pills were continued till his mouth became exceedingly ſore, and a good deal of ſalivation induced which happened at the end of a fortnight. At this period the pills were left off, and only a drachm of the ointment employed daily. The common wax ointment was applied to the ſores, and renewed morning and evening.

Till he entered upon this courſe the ſores had at all times given him much uneaſineſs. They had never produced acute pain, but they were accompanied with an uneaſy, itchy ſenſation, which frequently deprived him entirely of reſt. Before the end of the third week this was completely removed; the ſores were become clean, and the diſcharge of a better conſiſtence; at the ſame time that his aſthmatic ſymptoms were by no means ſo ſevere. As by this he was convinced of the propriety of the courſe of mercury, he readily ſubmitted to the diſtreſs and inconvenience which it produced, and kept his mouth fully affected during the whole time of it. By the beginning of March, that is, after having taken mercury for nearly ſeven weeks, all the ſores were entirely healed excepting that upon the outſide of the thigh and thoſe upon the legs. Even theſe were much diminiſhed, and the cure in all the three ſeemed to be retarded only by the ſtate of the bones beneath, which were found to be denuded of the perioſteum, and even in ſome parts rough. Theſe, as well as the others, had been dreſſed with mild wax ointment from the firſt, and excepting the laying open the ſinus upon the fore arm, no farther attention had been given to any of them. He now breathed eaſily and had not experienced any ſevere fit of aſthma from the time that his mouth became firſt fully affected with the mercury.

The courſe was carried on in the ſame degree to the end of the thirteenth week, when judging from the quantity of mercury employed, and the regular manner in which it had been taken, that the virus by which his diſeaſe ſeemed to have been produced muſt be eradicated, I cauſed him to leave it off. The aſthma was entirely gone, and all the ſores continued firm and well, excepting the three I have mentioned. I now ſuppoſed, however, that theſe were kept up entirely by the carious bones on which they were ſeated; and as a cure could not be looked for till the diſeaſed parts exfoliated, and as this might probably be tedious, I adviſed him, as ſoon as he could with ſafety venture upon a journey, to go home, and to do nothing with a view to the ſores but dreſſing regularly with red precipitate ointment in order to prevent the growth of a fungus, with which all the three were covered. This, with the occaſi-

onal uſe of calcined allum, prevented the fungus from being conſiderable; but it was not till a year had elapſed that any of the ſores healed. About this period an extenſive exfoliation appeared to be coming away from the tibia of the right leg. He now came to town, and by cutting into it I got it eaſily out, and the ſore healed in a fortnight. The ſore on the other leg healed in a ſimilar manner at the end of three or four months after a ſmall ſpiculated portion of the tibia had come away, but the ulcer upon the trochanter has not healed. Several ſmall pieces of bone have from time to time come away, but I conclude that more muſt be thrown out before a firm cicatrix will form; for although now reduced to the appearance of a narrow ſinus, which frequently heals, it always burſts out again. It is not, however, productive of much inconvenience; and on account of the ſituation of the bone, I think it better to truſt to time alone than by means of any operation to attempt to promote the exfoliation of the diſeaſed parts. No return of aſthma has taken place, and he is now in good health.

In the month of May 1789 I was deſired to viſit a patient, by trade a brewer, aged forty, and very corpulent. For ſeveral years he has been liable to periodical returns of aſthma, and during all that period his breathing had been difficult, inſomuch that he had for the moſt part been obliged to ſleep nearly in an erect poſture. He had been liable to frequent and very diſtreſsful palpitation of the heart, and his pulſe was at all times frequent and irregular. Other practitioners had previouſly been called, and, as is uſual in ſuch caſes, different opinions were formed of the cauſe of the diſeaſe. By ſome it was conſidered as gout; others judged it to proceed from hydrops pectoris, while by ſome it was ſuppoſed to conſtitute what of late has been termed angina pectoris. The patient himſelf, however, was of opinion, that all his ſymptoms originated from what he termed an ill-cured pox. He informed me that in his earlier years he had ſuffered much from frequent attacks of ſyphilis, and not having taken mercury in a regular manner; particularly from the laſt attack, and to which this affection of his

breathing had ſucceeded: From this he was convinced that the virus had not been eradicated.

No evident ſymptoms of Lues Venerea, however, could be diſcovered; ſo that I could not venture to adviſe a courſe of mercury as my patient wiſhed me to do. Purgatives, diuretics, and bliſters, were repeatedly employed, but with no advantage; and ſome relief being derived from opiates, he was at laſt induced to truſt entirely to a large doſe of laudanum taken at bed-time, and a leſſer doſe in the morning. In this ſituation I left him in the month of September, nor had I again occaſion to ſee him till the month of April 1790, when I was called on conſultation with the ſurgeon of the family for an ulcer which two months before had appeared upon the right ſide of the noſe. At firſt this ulceration was ſo inconſiderable as ſcarcely to excite his attention; but, as it ſoon began to ſpread, various applications were employed, from the mildeſt to the ſtrongeſt eſcharrotics; but although theſe, with the occaſional uſe of lunar cauſtic, had proved uſeful, by preventing the growth of fungus which had previouſly prevailed, ſtill the ſore continued to extend, and at this time had ſpread to the oppoſite ſide of the noſe. Upon inquiry I found that in the month of November, ſome days after expoſure to infection, a chancre had appeared upon the glans penis; but as it healed by being twice touched with cauſtic, and which he had done without the knowledge of his ſurgeon, he had not thought it neceſſary to enter upon the uſe of mercury.

At this time the difficulty of breathing and diſtreſsful palpitation of the heart were more ſevere than they had ever been at any period; but the account which I had received of this recent infection, the progreſs which the ulcer was daily making, and the inefficacy which had already been experienced of local applications, determined me to adviſe an immediate and full courſe of mercury. Being informed that mercury did not readily affect him, both the internal and external uſe of it was adviſed; ſo that in the courſe of ten days his mouth was rendered as ſore as he could poſſibly bear it, and he ſalivated to the

quantity of between two and three Engliſh pints a day. The ſore was dreſſed with common wax ointment.

In the courſe of three weeks from his entering upon the uſe of mercury the ſore was conſiderably diminiſhed, and at the end of ſix weeks it was entirely healed; but to the ſurpriſe and ſatisfaction of all concerned all his other ſymptoms became better on the mercury taking effect. The difficulty of breathing was ſoon much relieved, the palpitation vaniſhed entirely, and the pulſe fell to its natural ſtandard. It was ſeveral weeks before the aſthmatic affection left him entirely, but this happened before the end of the courſe, which was continued to the end of the third month; and he has not ſince that period experienced any return of his diſorder.

In this laſt caſe it may be a queſtion whether the patient laboured under ſyphilis at the time when I firſt ſaw him or not: He himſelf imagined that he did; and on finding afterwards that the diſeaſe in his breaſt was completely removed by mercury, when rendered neceſſary by the preſence of a more obvious ſymptom of the diſeaſe, I came alſo to be of the ſame opinion, and this induced me to give the mercury in large quantity, and to continue it longer than would have been neceſſary for the cure of a more recent infection.

In March 1787 I was conſulted by a gentleman of fortune in the ſouth of England. His caſe was deſcribed to be a ſevere rheumatic affection, with which he had been afflicted for the ſpace of eighteen months. After much expoſure to cold and wet weather in the courſe of hunting, he was attacked with ſevere pains in all his joints, particularly in the ſhoulders, wriſts, knees, and ancles. Theſe continued in ſome degree from the firſt approach of the diſeaſe, but he had occaſionally been diſtreſſed with ſevere pains in his back, loins, and hip-joints, to ſuch a degree as not to be able to move for two or three weeks together but with an unſupportable increaſe of pain. His fingers and toes alſo became ſwelled and painful; and as the balls of the great toes had been particularly affected his diſorder by ſome had been conſidered as gout. At the time of my being conſulted the joints of his fingers were ſo much ſwelled that he could not even ſign his name, but

the chief cauſe of his diſtreſs at that time was a ſwelling of his right knee. The ſwelling and pain in his other joints had at different periods prevailed in various degrees; they even at times left him entirely; but the right knee had continued ſwelled and painful from the firſt, and at this period it was repreſented as being nearly double the ſize of the other. There was accordingly much tenſion, and a very extenſive fluctuation had for ſeven or eight weeks been diſcovered in the ſuperior part of the tumour. The ſkin, however, was no where diſcoloured. He was at this time thirty-two years of age. When firſt attacked with the diſorder he was full and vigorous, but now much emaciated. His pulſe, however, was good, for although for a conſiderable time a good deal of fever prevailed, it had now left him entirely, his ſkin was cool, and his pulſe between ſeventy and eighty in a minute.

The remedies he had employed were theſe: At firſt he was repeatedly blooded; the pained parts had been rubbed with a variety of ſtimulating applications, ſuch as volatile liniment and tincture of cantharides, and bliſters had been frequently applied. He had taken James's powders, camphors, and opium; but the latter being the only remedy from which he derived relief, the others had long been diſuſed. Sixty drops of laudanum taken at bed-time, and twenty-five in the morning kept him for the moſt part tolerably eaſy, but he experienced much diſtreſs whenever theſe were omitted. The following is the advice which I propoſed to him:

1. That two drachms of a weak mercurial ointment, containing only a fifth part of mercury, ſhould be rubbed upon the ſwelling of his knee evening and morning for the ſpace of twenty minutes each time, and continued five or ſix weeks if it did not excite ſalivation.

2. That he ſhould uſe a warm bath of ſea-water every ſecond night: The whole body to remain immerſed for the ſpace of twenty-five minutes, or half an hour, and a quantity of the warm water to be poured from the height of three or four feet upon the ſwelled knee at each time of uſing the bath.

3. Inſtead of laudanum at bed-time, that he ſhould take fifteen or twenty grains of Dover's powder.

4. That he ſhould wear flannel next his ſkin, not only upon the diſeaſed knee, but over his whole body.

5. If by theſe means the ſwelling did not abate in the courſe of four or five weeks, that bliſters ſhould be applied to it; the firſt to be applied upon that part of it in which the fluctuation was diſcovered, and the others alternately on each ſide of the joint.

I heard again from him in the month of June, when he informed me that he had been prevented from uſing the mercury by a phyſician who had been conſulted on the receipt of my opinion. Being afraid that his debility might be increaſed by the mercury, he had deſired that it might not be uſed, but all the other parts of the courſe which I had pointed out had been complied with. His general ſtate of health was better, and by the uſe of the warm bath and Dover's powder his pains had been much relieved, but they always recurred on theſe remedies being laid aſide, and the ſwelling of the knee was nearly in the ſame ſtate as when he firſt applied to me. Beſides this, he had been attacked with a painful ſwelling on the upper part of his right ſhoulder, which, after becoming red and tender, had ended in an extenſive foul ulcer. This giving riſe to much anxiety, for the ſore was daily becoming deeper, he was particularly anxious to have ſome remedy pointed out for it.

In return to this, I deſired that the mercury might ſtill be employed with a view to remove or leſſen the ſwelling of the knee, and I gave him formulæ of different ointments as dreſſings for the ſore on the ſhoulder. I ſaid, however, that he muſt depend chiefly on the ſurgeon in attendance for the treatment of this ſore; but being within forty or fifty miles of London, I adviſed him, if he did not ſoon get better, to go there for the advantage of a conſultation.

I did not hear of him again till the month of September, when he arrived in Edinburgh. He now informed me that he had gone to London on the receipt of my ſecond letter, and that he had been adviſed to the uſe of guiacum; a deep-ſeated pea iſſue had been inſerted on the inſide of the ſwelled knee; and differ-

ent ointments had been given him to apply in ſucceſſion to the ſore on the ſhoulder. Having continued, however, under the regular application of theſe for upwards of two months, and no advantage accruing from them, he determined at laſt on coming here. The pains over his joints were ſtill very univerſal, almoſt every joint being more or leſs ſwelled, but they were not any where ſo ſevere as they had at firſt been. The ſwelling on the knee was very conſiderable, and a fluctuation was perceived, reaching from the patella, beneath the rectus muſcle, nearly to the middle of the thigh. The ſkin, however, was not diſcoloured, and the joint was ſtill in ſome degree capable both of flexion and extenſion. But the ſymptom which gave him moſt uneaſineſs was the ulcer upon his ſhoulder, which had now extended from the top of the ſhoulder over the clavicle, and down to the middle of the humerus. It had already deſtroyed ſome part of the deltoid muſcle, by which the motion of the arm was much impeded, and a conſiderable portion of the clavicle was become carious.

This ulcer he had lately been informed was of a ſcrophulous nature, but as to me it had many of the appearances of a venereal ſore, I decidedly ſaid ſo, and on inquiry I found that there was ſtill farther cauſe of ſuſpicion. About three months before he was firſt attacked with rheumatiſm two ſmall chancres appeared upon the penis, which were removed in the courſe of eight or ten days by the application of cauſtic, and the uſe of a very ſmall quantity of mercury. The quantity he could not exactly aſcertain, but he knew that he had not taken it for a week, and that his mouth had never been ſore with it. I alſo found, that nearly about the time at which his ſhoulder became ſore an eruption had appeared upon different parts of his body, particularly among his hair and on his breaſt, but which till now he had not mentioned, as he had not ſuppoſed it to be of any importance. This, however, along with the other circumſtances of his ſituation, determined me to adviſe a full courſe of mercury, and which he the more readily agreed to from eve-

ry other remedy which had hitherto been tried having proved ineffectual.

He entered upon this courſe on the ſixth of October. At firſt half a drachm of the blue ointment was rubbed in evening and morning, and one of the blue pills, with two grains of opium, were given at bedtime. The opium was neceſſary not only for preventing purging, but from the patient having been in the habit of taking it. At the end of ten days, as the mouth was not affected, nor any other ſymptom produced by the mercury, the quantity both of pills and ointment was doubled. This, in the courſe of a fortnight, rendered the mouth exceedingly ſore, and produced ſome ſalivation; but the uneaſineſs excited by this was amply compenſated by the relief which he had obtained. Although the pains in his joints had abated they had ſtill given him much diſtreſs. This was almoſt entirely removed in the courſe of a day or two after his mouth became evidently affected, and being anxious to avoid the habit of taking opium, I found at the end of another week that he had left it off, and that he ſlept better without it than he had done for two years before. Still the knee continued nearly of the ſame ſize, but the ſore on the ſhoulder was much better. Under the ſame dreſſings which he had for ſome time been uſing the ſurface of the ſore ſoon became clean, the diſcharge was of a better conſiſtence, and much leſs offenſive, and in ſome parts new granulations had begun to appear.

The mercury was continued in ſuch quantities to the end of the third month as was neceſſary to keep the mouth completely ſore during the whole period, and during the courſe of the laſt of theſe months he drank daily an Engliſh quart of a ſtrong decoction of ſarſaparilla, guiacum, and mezereon.* At the end of ſix weeks all the ſwellings of the ſmaller joints, particularly thoſe of the fingers, were entirely removed, and even the fulneſs of the knee was conſiderably reduced. The ſore on the ſhoulder was already con-

* Vide Appendix, Vol. I. No. 46.

tracted to one half of its former size, and at the end of another fortnight the whole of it was cicatrised excepting those parts seated upon the carious part of the clavicle. At this time too the knee had assumed a very different appearance. It was not only much lessened but the fluctuation above the patella was entirely gone. No application had been made to it but a portion of the mercurial ointment, which, morning and evening, was rubbed upon it. In the course of the tenth week a thin, long exfoliation took place from the clavicle, and the small sore which remained healed in a few days thereafter. He continued here for several weeks after the course was over, and on going away, although the knee was about an inch in circumference larger than the other, it gave him no uneasiness, not even in walking; but a very considerable degree of stiffness remained in the joint of the right shoulder, and which I informed him might probably continue for a great length of time, perhaps even for life, owing to a considerable portion of the deltoid muscle having been destroyed by the ulcer. In order to lessen this stiffness as much as possible, I desired, as soon as the skin was sufficiently firm to admit of it, that the whole shoulder and arm should be rubbed evening and morning with some emollient oil, and if no relief was obtained from this, that he should go to Bath, and have the warm waters of that place pumped upon it. I found, however, after two years had elapsed, although in every other respect he continued well, that his shoulder remained in nearly the same state.

Many cases have fallen under my care of venereal pains which resembled rheumatism so much that it was difficult to distinguish of what nature they were; but in a great proportion of these, circumstances were discovered upon enquiry, by which the distinction was sufficiently well marked. In this, however, as well as in some others which I have met with, the symptoms were for a long while so evidently rheumatic that there was not the least cause to suspect them to be venereal. Venereal pains almost universally fix upon the middle parts of limbs; very rarely up-

on the joints only. Now in this case the joints only were affected, as very commonly happens in rheumatism, and the patient having been much exposed to the most frequent cause of that disease, while no symptom occurred that had any appearance of being venereal till these pains had continued upwards of twenty months. The ulcer on the shoulder was the first symptom that created suspicion; for when I prescribed the mercurial ointment, it was not, I must acknowledge, from thinking that the patient was infected with Lues Venerea, but from experience of its utility in similar affections of the joints proceeding from other causes.

An officer of the navy, who had been exposed to hard service both in the East and West Indies was seized with severe rheumatic pains in spring 1782. At first they were confined to the large joints, but afterwards a soreness prevailed over his whole body. He was about forty years of age, and till this time he had been strong and healthy.

All the remedies usually employed in rheumatism were advised. Flannel was applied, and the pained parts were rubbed with a variety of stimulating applications; blisters were applied to the parts that were most painful; sudorifics were used in various forms; and in the course of the first three years he had used a great variety of baths. He bathed at first in warm salt-water, and afterwards went both to Buxton and Bath; and he had last of all used the cold bath. No advantage, however, was obtained from any of these; and at last the only remedy which he employed was a large dose of laudanum at bed-time.

He had frequently been liable to pain and some degree of fulness in the region of the liver, which he attributed to his residence in India. This, however, never gave him much uneasiness, till the winter of 1785, when a soft diffused swelling, larger than it had ever been, and accompanied with some pain, was perceived exactly on the site of the liver. The tumour became larger, and at last a fluctuation of matter was perceived in it. In this situation I first saw him in the month of April; and the chief reason of my being called was to judge of the propriety of discharging the matter by an operation. This, however, I found to be inadmissible. The matter lay so deep that

it did not point any where, and the fluctuation was very obscurely felt. I therefore in the mean time advised, that mercury, which he was then taking, should be given in greater quantities, so as to render his mouth completely sore, and, as he was much reduced in strength, that his constitution should be supported with light nourishing food.

As he lived at a considerable distance I did not expect to see him again, neither did I hear any thing of him till the month of February thereafter when I was again desired to visit him. A considerable change had taken place in the nature of his complaints, and the following is the account which I received of it. His mouth had been rendered moderately sore with mercury, and in this situation it was kept for three weeks; but as it then gave him severe pains in his bowels, accompanied with purging, he did not afterwards use it in such quantities, nor was it judged necessary to do so, as the swelling, for which it was prescribed, was almost entirely carried off by what had already been done. It was therefore given in such quantities, as his stomach and bowels could easily bear; and this being continued for the space of a month longer, that is, for six or seven weeks in all, it was then left off. During this course of mercury the pains which had so long distressed him were much less severe, and at one period they had left him almost entirely. While the weather continued mild in summer and harvest they did not recur; but about the end of October they became more severe than they had ever before been. A few weeks, however, previous to this, symptoms of a more hazardous nature had made their appearance. In the month of September he was attacked with anasarcous swellings of his legs, and soon thereafter with ascites, which, notwithstanding the usual remedies employed in such cases, increased so quickly, that in the course of seven or eight weeks from the first approach of the swelling, it became necessary to draw the water off from the legs by punctures; and by the middle of December the distension of the abdomen was so considerable that the operation of tapping was judged advisable. These operations, however, had procured only a temporary relief, for although

the punctures had been frequently repeated, his legs, at the time of my being called to him, were much ſwelled, and his abdomen was more diſtended than at any period before the operation.

The chief reaſon, however, of my advice being taken at this time, was the appearance of ſome hard painful tumours upon his forehead, legs, and arms, one of which upon his right arm on the outſide of the ulna, and another on the upper part of the os frontis, had burſt ſome weeks before, and were now diſcharging a conſiderable quantity of a thin fœtid matter. The others, viz. two upon his forehead, one upon his left arm, and one upon each leg were become very painful, and thoſe on the head were diſcoloured, and contained ſuch a quantity of matter as gave reaſon to think that they would alſo burſt. The patient was at this time much emaciated, but he had no fever, and his ſkin was ſofter and his diſcharge of urine more plentiful than they generally are in dropſical complaints.

As the tumours reſembled venereal nodes, and as the peculiar fœtor of the diſcharge from the ulcers, together with their ſloughy appearance, gave farther cauſe of ſuſpicion, I found, upon enquiry, that in September 1781, about ſix months before he was attacked with rheumatiſm, chancres appeared upon his penis, and a bubo in each groin, but that theſe ſymptoms were eaſily removed by the uſe of a ſmall quantity of mercury, and a ſhort confinement of eight or ten days, and that he had not ſince that period run any riſk of being infected; that no other ſymptoms of the diſeaſe had appeared upon him, and that the only mercury he had uſed was that which was preſcribed for the affection of his liver.

I now began to ſuſpect even that the rheumatiſm with which he had ſo long been diſtreſſed was of the ſyphilitic kind, and my reaſons for doing ſo were apparently concluſive. There was full evidence of infection being communicated while it did not appear that he had taken half the quantity of mercury which the nature of the ſymptoms that enſued would have required. Theſe pains occurred at ſuch a diſtance from the other ſymptoms as tended to confirm the ſuſpicion. They had not been re-

lieved by any of the remedies which in the ordinary form of rheumatiſm prove for the moſt part uſeful, while they were for ſome time almoſt entirely removed by the mercury employed for the diſeaſed ſtate of his liver. Theſe conſiderations, connected with the preſent appearances of the tumours and ulcers, determined me to ſay that he was poxed, and that he ſhould begin to the uſe of ſuch a quantity of mercury as his preſent ſituation would admit immediately upon the water in his abdomen being taken off, and which was done that very day.

Being afraid in his preſent ſtate of debility of irritating his bowels by the internal exhibition of mercury, he was deſired to uſe it in the form of unction only; and his legs being ſtill much ſwelled and tender, he was made to rub it upon his arms and abdomen. In the courſe of a few days his mouth became ſore, and at the end of a fortnight he diſcharged three or four Engliſh pints of ſaliva daily. This was more than we wiſhed for, and he was deſired to leſſen the quantity of mercury; but as his pains were ſoon almoſt entirely removed, and the diſtreſs which he had experienced from the tumours and ulcers being alſo much leſſened, he was thereby ſo much convinced of the propriety of his preſent treatment that it was with ſome difficulty he was prevented from carrying the courſe of mercury too far. Care, however, being taken, to ſupport him with a light nouriſhing diet, and with a liberal uſe of wine, of which he took a bottle daily, he was enabled to bear the effects of mercury better than one in his ſtate of health might otherwiſe have been expected to do. At the end of eight weeks, during which period his mouth had been kept conſtantly and fully affected, he had uſed twelve ounces of ſtrong mercurial ointment. His pains were now entirely gone; the ulcers were cicatriſed; and the tumours were ſo completely removed, that excepting thoſe on the fore part of the legs, none of them had left any fulneſs by which their former ſituations could be diſcovered. The matter contained in thoſe upon the forehead, and which at one period was juſt ready to burſt out, was entirely abſorbed, and only a ſlight diſcolouring of the ſkin remained; but what was ſtill more remarkable, no ſwelling had as yet occurred in

the abdomen, and the anaſarcous ſulneſs of his legs and thighs was almoſt entirely gone, although the punctures laſt made in them had been healed upwards of three weeks. The mercury was continued for five weeks longer, during which period four ounces of ointment was rubbed in, by which the mouth was kept as ſore as the patient could poſſibly bear it; and when at the end of the thirteenth week the mercury was left off no collection could be perceived in the abdomen; and excepting a ſlight degree of œdema on the upper part of the feet, they were altogether free of ſwelling. Even this diſappeared in the courſe of a few weeks; and at the end of three years, when I had laſt an opportunity of hearing of him, he remained in good health.

The circumſtances of this caſe, while they give much cauſe to think that hydropic ſymptoms may be induced by the virus of Lues Venerea, tend alſo to ſhew that mercury given in ſufficient quantity acts with equal certainty in removing them as in the cure of any ſymptom of the diſeaſe. They alſo evince the power of mercury in the cure of that affection of the liver to which many are liable who have reſided in the Eaſt Indies; and that even the moſt advanced ſtages of that diſorder may be removed by a quantity of mercury that will not be ſufficient for the cure of Lues Venerea. It alſo appears, from the reſult of this caſe, that the matter which ſometimes forms in venereal nodes may be collected in conſiderable quantity, and yet carried off by mercury. It may be proper, however, to remark, that where this takes place the tumours in which the matter is contained begin to diminiſh almoſt as ſoon as there is evidence of the mercury having entered the ſyſtem; and that when they do not diminiſh the matter ſhould be diſcharged by a proper opening, in order to prevent it from affecting the bone beneath.

About two years ago I was deſired by a gentleman to viſit his wife, who I found had been liable for more than a year to what ſhe conſidered as ſcorbutic ſpots upon different parts of her body, one of which, ſeated on the ſternum, had about three months before

ended in an ulcer. At firſt the ſore did not exceed the ſize of a ſixpenny piece; but at this time it was very extenſive, reaching from one mamma to the other, and almoſt from the inferior point of the ſternum to the top of it. It was foul, and diſcharged a thin fœtid ſanies. For upwards of three years ſhe had been diſtreſſed with almoſt a conſtant head-ach, which occaſionally was ſo ſevere as to deprive her entirely of ſleep for many days together, and on ſome occaſions nearly of her reaſon. It did not, like the aguiſh head-ach, fix upon one ſpot, but affected every part of the head alike. She was now about thirty years of age, and her menſtrual flux regular. Till attacked with theſe head-achs ſhe was healthy and rather corpulent; but now ſhe was much reduced, being almoſt entirely confined to bed with the violence of the pain, and ſhe had ſcarcely any deſire for food. Blood-letting, bliſters, bark, cold-bathing, and a variety of nervous medicines, had all been tried in vain.

The eruption upon the ſkin, as well as the ulcer on the breaſt, having the true venereal aſpect, I enquired of the huſband whether he had of late been infected or not: He ſaid that he had not, but he candidly informed me, that ſoon after his marriage, which happened more than four years before, and when he had no reaſon to think that he was infected, for he had no connection with any woman for a fortnight before marriage, and after having remained well for a fortnight thereafter, a chancre had appeared upon the preputium. Immediately upon this being perceived he applied to a ſurgeon and was cured; and he had every reaſon to think that his wife had eſcaped; for although ſhe had complained of a ſoreneſs in the pudendum about the ſame period, it had gone ſo entirely off without any mercury being given, that the ſurgeon, by whoſe advice he was directed, had aſſured him, it muſt have proceeded from ſome other cauſe. He alſo recollected that ſoon thereafter a painful tumour had formed in one of her groins; but as it alſo went off without coming to ſuppuration, and without the aſſiſtance of mercury, he had ſuppoſed even that this ſymp-

tom could be venereal, particularly as ſhe continued in perfect health till attacked with the head-ach; and no ſymptom of pox had ever appeared upon her, unleſs the eruption and ulcer already deſcribed ſhould be of that nature.

From the whole of this hiſtory, the probability of the wife being infected with the venereal diſeaſe, and the neceſſity of a mercurial courſe were abundantly evident. Mercury was accordingly exhibited. Opium, which ſhe had hitherto employed for leſſening the violence of her head-ach was continued, while the ſore was dreſſed with common wax ointment. Her mouth became ſore in the courſe of a few days, and before the end of a fortnight ſhe was under ſome degree of ſalivation. The eruption ſoon began to leſſen, and the ſore from being exceedingly foul became clean and florid, at the ſame time that the head-achs, for which no cure was expected, left her entirely: the mouth was kept completely affected; the blotches diſappeared altogether in the courſe of ſix or ſeven weeks, but the ulcer was not cicatriſed till the end of the eleventh week. The mercury being continued three weeks longer was then laid aſide, and neither the head-ach or other ſymptoms have ſince recurred.

In the month of July 1781 a young man about ſeventeen years of age was put under my care in a very miſerable ſituation. The account which I received from his parents was, that till his fourteenth year he was remarkably ſtrong and healthy, and exceedingly clever. About that period he became delicate, and was taken from ſchool, in order to have full attention paid to his health. Worms, and a variety of other cauſes were ſuſpected to give riſe to this ſtate of delicacy, and various remedies were employed without effect, when after two years had nearly elapſed ſores appeared on different parts of his body; his eyes became tender and inflamed, and at laſt he loſt the uſe of one eye entirely, and about a year before I ſaw him he had been attacked with ſevere fits of epilepſy, which for the laſt two months had recurred ſeveral times a-day. He was now much emaciated, but his pulſe was good, and the fits had not impaired his judgment.

Till this time he had been under the management of a phyſician, a relation of his own, who conſidering the complaint to be ſcrophulous, had preſcribed bark, ſteel, cicuta, and ſea-bathing; all of which, as well as different remedies for the epileptic fits, having been tried in vain, all hopes of a cure were loſt, and for a long while nothing had been employed. My opinion was aſked on account of the ulcers, ſome of which had of late become ſo painful that large doſes of laudanum were required to procure reſt. Beſides ſeveral ſmall ulcerated ſpots, there was at this time ſeven large foul ulcers on different parts of his body, none of which had given him much uneaſineſs while not deeper than the cellular ſubſtance; but having in different parts penetrated into the ſubſtance of muſcles, they began now to impede the motion of the parts on which they were ſeated, which added much to the diſtreſs which they excited. His left eye exhibited a very ſingular appearance. It was ſomewhat enlarged, and that part of the tunica conjunctiva, which in a ſtate of health is white, was of a deep red colour, while all the prominent part of the cornea oppoſite to the pupil was much thickened, and white like paper. He ſtill retained the ſight of his right eye, which, however, was much inflamed, and in a ſtate of great irritability.

As the ulcers had a venereal appearance, particularly one upon the right ſide of his noſe, and another on one of his temples, where it had penetrated to the muſcle, I ſaid ſo to the young man himſelf, and he confeſſed that he had all along been afraid of his diſeaſe being of that nature, but not being certain of this being the caſe, and afraid of incurring the diſpleaſure of his parents, he had never till now, that enquiry was made concerning it, had the reſolution to ſpeak of it. The information he gave me was, that when he was about fourteen years of age he was infected by a woman with whom he had connection, and that his ſymptoms had been ſores upon the penis and a ſwelling in the groin. Theſe, by the uſe of mercury, which he received from a young man, at that time a ſtudent in the univerſity, were removed; but as he had not taken it in a regular manner, and only in ſmall quantity, he had always entertained ſuſpicions of the ſymptoms which enſued be-

ing the conſequence of this infection. I now decidedly ſaid that he ought immediately to take mercury, and he entered upon the uſe of it that very evening. It was employed in the form of unction, and all the ſores, excepting that upon his noſe, were dreſſed with common cerate, the only application which he had hitherto made to them. As the ulcer upon his noſe had already begun to disfigure his face, I adviſed it to be touched with cauſtic every ſecond or third day, in order to ſtop the progreſs of the diſeaſe as quickly as poſſible, and beſides this it was dreſſed with baſilicon and precipitate. As the mercury did not readily affect his gums he was deſired to take two of the blue pills every night at bed-time, and to continue to rub in the ſame quantity of ointment which he had uſed from the firſt, viz. a drachm evening and morning. In the ſpace of three weeks from the commencement of the courſe a conſiderable ſalivation was induced, which was afterwards kept up by the unction alone till the end of the fifteenth week. The ulcers had become clean, and put on a healing appearance ſoon after the mouth became ſore, and by the end of the ninth week they were all cicatriſed; but the infection having been of very long duration, and the ſymptoms more inveterate than uſual, I did not think it proper to adviſe the uſe of mercury to be ſooner left off.

The moſt remarkable circumſtance, however, in this caſe was, the cure which took place during the courſe of mercury of the fits of epilepſy. In leſs than three weeks they became leſs frequent, and not ſo violent as they had been before, and by the end of the ſixth week they did not recur above once in three or four days. Long before the courſe was finiſhed they vaniſhed entirely, nor was he ever diſtreſſed with them afterwards. His left eye ſtill continued white and opake, but the inflammation of the other being removed, he ſoon recovered the free power of viſion, of which he had long been entirely deprived.

A married lady, twenty-ſix years of age, after being for ſome time diſtreſſed with ſevere head-aches, was attacked with epileptic fits, which at firſt were neither frequent nor ſevere, but recurred at laſt ſo often that ſhe was commonly ſeized with three, four, or even more, daily. Preparations of copper and other remedies were employed with-

out effect. In other respects her health was good, till at last, after the fits had been more than usually severe for eight or ten days, she became suddenly lunatic, from which time the epilepsy did not recur.

In this situation she was kept at home for three or four months, but there being no prospect of her recovering, she was at last put under the care of a family accustomed to take charge of lunatics. As her keepers were desired to apply to me in the event of her health requiring any particular attention, I was called to her after she had remained with them about two years, in order to give directions for the management of some sores which had appeared in different parts of her body a considerable time before. Besides several small foul ulcers upon her toes and feet, there was a large one upon the wrist of her right arm; one upon her side, which had penetrated nearly to the ribs, and two upon the upper and back part of her head, where the cranium was found to be carious. These ulcers, they informed me, were preceded by an eruption, which they considered to be scorbutic, but which I found upon inspection to be venereal. On this being stated to her husband, he acknowledged that she might have been infected by him, but as she had never complained of any of the symptoms of Lues Venerea, he had hoped that she had escaped.

A course of mercury was advised, but as her lunacy was of the most unmanageable kind, she could not be made either to take the medicine inwardly, or to admit of the external application by unction. The latter might have been done by force, but the trouble of securing her twice a-day for that purpose would have been considerable.

Finding that she was fond of oatmeal porridge, she was allowed to take them both to breakfast and supper, and with each meal her keeper was desired to mix a spoonful of a watry solution of corrosive sublimate, in which was contained three quarters of a grain of this preparation. No obvious effect appeared from it till nearly the end of the third week, when her breath became affected, and her gums sore and spongy; but although the same quantity of mercury was continued, no salivation took place. Simple dressings

were applied to the ſores. It became neceſſary, however, to make an inciſion along a conſiderable part of the left parietal bone, in order to diſcharge a quantity of fœtid matter which had lodged between the teguments and a portion of that bone which was carious. All the reſt of the ſores ſoon put on a healing appearance. In the courſe of nine weeks they were completely healed, and during this period the maniacal ſymptoms alſo abated. In leſs than three weeks from the above period ſhe became perfectly well, and no appearance of lunacy has ſince taken place, although ſeveral years have elapſed. The ſore upon the left ſide of the head continued open for eight or nine months after the mercurial courſe was finiſhed, owing to an extenſive exfoliation from the parietal bone, which could not poſſibly be accompliſhed ſooner.

Theſe, as I have already obſerved, are only a few of a conſiderable number of caſes of a ſimilar nature which I might relate; but as the evidence which theſe afford, of the opinions which I have ſuggeſted being well founded, may be conſidered as ſufficient; any farther argument would be unneceſſary. The hiſtories which I have given are in proof, that the ſyphilitic virus may remain for a great length of time in the ſyſtem, without producing any of the ordinary ſymptoms of Lues Venerea: That other diſeaſes altogether different from Lues Venerea in the form under which it uſually appears, are, in ſome inſtances, induced by this virus. That the quantity of mercury commonly given in what is termed an alterative courſe may be ſufficient for curing the exiſting ſymptoms of Lues Venerea, and yet altogether inadequate, however long continued, for removing the diſpoſition. And laſtly, although a courſe of the alterative kind may repeatedly fail, that the ſyphilitic diſpoſition, as well as the worſt ſymptoms of the diſeaſe, may be removed by the proper exhibition of a full quantity of mercury.

APPENDIX

To VOL. I.

THIS Appendix contains formulæ of injections and other remedies for Gonorrhœa, enumerated in the preceding work.

No. 1. R. Calomel. pp^{tt}. ʒ ii.
Mucilag. gum arab. ʒ ii. et adde.
Aq. roſar. ʒ iv.

No. 2. R. Calomel. pp^{tt}. ʒ ii.
Balſam. copaib. ʒ i.
Vitell. ovi. ʒ ſs. M. et adde paulatim.
Aq. roſar, ʒ iv.

No. 3. R. Hydrargyr. puriſ. ʒ ii.
Mucilag. arab. ʒ ii. M. S. A. et adde.
Aq. deſtillal. ʒ iv.

Theſe formulæ of mercurial injections ſeem to act, as I have elſewhere obſerved, altogether as aſtringents. They excite little or no irritation, and when they prove ſucceſsful they commonly do ſo in the ſpace of a day or two. In all of them the mixture requires to be ſhaked when uſed; for even with the aſſiſtance of mucilage the mercury ſubſides ſo quickly that ſcarcely any of it will enter the ſyringe, if this precaution be omitted.

Inſtead of mucilage, preſcribed in No. 3, I have ſometimes employed honey. This proves more expeditious for extinguiſhing the mercury, but the injection prepared with it excites more pain. Whether mucilage or honey be employed, the mercury ſhould be very completely titured.

No. 4. R. Lap. calamin pp^{tt}. ℈ ii.
Balſam. copaib. ʒ i.
Mucilag. arab. ℥ ii. M. S. A. et adde.
Aq. fontan. ℥ iv.

No. 5. R. Lap. tutiæ pp^{tt}. ℈ ii.
Mucilag. arab. ℥ ii. M. et adde.
Aq. fontan. ℥ iv.

No. 6. R. Lap. calam. pp^{tt}. ℥ iv.
Camphor. in pauxil. ſpirit. vin. rect. ſolut. ℥ i.
Mucilag. arab. ℥ iv. M. et adde aq. fontan. ℔ vi.
Ut fiat injectio.

In No. 4, quantity of the aſtringent earth is ſo ſmall that it may be well mixed with the liquid at the time of uſing it, but in Nos. 5 and 6, where there is a greater proportion of earth, after ſhaking the phial, it ſhould be allowed to ſubſide for the ſpace of a minute before filling the ſyringe. In this manner the finer particles only of the earth are thrown into the urethra; and it commonly proves as effectual as when the whole of it is uſed.

No. 7. R. Alumen, ʒ iſs.
Solve in aq. diſtillat. ℥ viii.

No. 8. R. Cortic. quercus ℥ i.
Coq. in aq. fontan. ℥ xx. ad. ℥ xvi. colaturæ adde.
Pulv. alumen. ℥ ii.

No. 9. R. Gall. quercus contuſ. ʒ i.
Coq. in aq. fontan. ℥ xxx. ad. ℥ xx. cola et adde.
Pulv. alumen. ʒ iii.

No. 10. R. Kin. pulv. ʒ ii.
Mucilag. arab. ℥ i. M. in mortario et adde aq. fontan. bul. ℥ x.

No. 11. R. Kin. pulv. ʒ ii.
Pulv. alumen. ʒ i.
Opii. ℈ ii.
Mucilag. arab. ℥ i. M. et adde.
Aq. fontan. bul. ℥ x.

No. 12. R. Opii. ʒ i. ſolve in aq. font. ℥ vi.

No. 13. R. Aq. roſar. ℥ vii. ſs.
Tinctur. thebaic. ʒ ſs. M.

In a great proportion of caſes opium diſſolved in water anſwers the purpoſe; but in a few inſtances I have found the ſpirituous tincture, in the proportions here mentioned, prove more effectual.

No. 14. R. Balſam. canadens.
Vel. copaib. ʒ iii.
Vitell. ovi. ʒ ſs. M. et adde.
Aq. roſar. ʒ vi.

When the balſam and yolk of an egg are previouſly well rubbed together, the water may be mixed with them ſo completely that no great degree of ſeparation will afterwards take place; but to prevent any inconvenience which might enſue from the balſam getting to the top of the mixture, it ſhould always be well ſhaked immediately before the ſyringe is filled with it.

No. 15. R. Cerufs. ʒ ii.
Mucilag. arab. ʒ ii. M. et adde.
Aq. fontan. deſtil. ʒ vi.

No. 16. R. Sacch. ſaturni. ϑ i.
Solve in aq. deſtil. ʒ viii.

No. 17. Aq. diſtill. ʒ viii.
Acet. lythargyr. gutt. xxiv. M.

When ſaccharum ſaturni, or ceruſſa acetata, as it is now termed, can be obtained pure, it is perhaps preferable for every purpoſe to vinegar of lytharge, as being of a more determined ſtrength; but it is frequently ſo much adulterated that it will not diſſolve but in very ſmall quantities, even in diſtilled water. Some of it indeed is ſo very inſoluble, that an ounce of water will not diſſolve above a grain of it. By the addition of vinegar this may, it is true, be partly remedied; but vinegar, for many purpoſes, is not admiſſible in ſuch quantities as would be neceſſary for rendering this article much more ſoluble than we uſually find it. Two, three, or more drops of the vinegar of lytharge may be uſed in every ounce of injection. Two drops often prove ſufficient, but many can bear eight or ten.

The following method of preparing vinegar of lytharge is the beſt I have met with. It is not very different from the extract of lead of goulard, but the ſtrength of it is more certain.

R. Lythargiri ℔ iii.
Acet. deſtillat. ℔ x. coq. leni igne ad. ℔ vi.
Cola.

Beſides boiling on a ſlow fire, during which time it ought to be well ſtirred with a wooden ſpatula, the whole ſhould be allowed to cool, and the fæces to ſubſide before ſtraining.

Lead diſſolved in this manner is eaſily mixed with water, and it proves to be a very convenient, as well as a very effectual method of uſing it.

No. 18. R. Zinci vitriolat. vulgo vitriol. alb. ʒ ſs.
Solve in aq. font. deſtillat. ʒ xvi.

No. 19. R. Zinci vitriolat. ℈ i.
Solve in aq. deſtillat. ʒ x. et adde.
Acet. lythargyri gutt. xx. ut. f. injectio.

In ſome caſes, where theſe articles have excited pain when uſed in this manner, they have been rendered perfectly mild by the addition of mucilage of gum arabic, and in others by camphor. Camphor does not diſſolve completely in any watery fluid, but being previouſly well rubbed with a few drops of ſpirit of wine, as much of it may be mixed with the water as to render the other articles much leſs pungent than they otherwiſe would be. The camphor, however, ſeparates in ſuch quantities as renders it neceſſary to filter the ſolution before uſing it.

Although a precipitation neceſſarily takes place from a mixture of vitriol and ſaccharum ſaturni, the following combination of theſe two articles with opium gives a very uſeful form of injection.

No. 20. R. Vitriol. alb.
Sacchari ſaturni. a a ʒ ſs.
Camphor, ʒ i.
Opii. ℈ ii.
Solv. in aq. fontan. bul. ʒ xvi.
Cola.

No. 21. R. Fol. roſar. rub. ʒ ſs.
Alumen. pur. ʒ ii. infund. in aq. bul. ʒ xvi. Cola. ut f. injectio.

No. 22. R. Balſam copaib.
Vitell. ovi. a a ʒ ſs. M. et adde.
Infuſ. roſar. rubr. ʒ xvi.

No. 23. R. Cap. papaver. alb. ʒ iv.
Rad. althæ incif. ʒ i.
Infund. per noctem in aq. bul. ℔ ii.
Cola.

No. 24. R. Hydrargyr. muriat. vulg. mercur. ſublimat. corroſiv. gr. i.
Solve in aq. fontan. ʒ x.

No. 25. R. Mercur. ſublim. corroſ. gr. i.
Acet. lythargyr. gutt. xvi.
Aq. fontan. ʒ viii. M. S. A.

No. 26. Mercur. ſublimat. corroſ. gr. i.
Mucilag. arab. ʒ ii.
Aq. fontan. ʒ vi. M.

Corroſive ſublimate diſſolved in water proves to be the moſt certain, and perhaps in every reſpect the beſt form of a ſtimulating injection. Some have adviſed a much ſtronger ſolution than any of theſe, even to the extent of a grain of mercury to three or four ounces of water. I ſuſpect,

however, that thoſe who recommend it of this ſtrength have never made uſe of it, at leaſt I have never met with any who could bear it. When the mercury is combined with water alone, as in No. 24. one grain to ten ounces proves ſufficiently ſtrong; but when mixed with ſaccharum ſaturni, with acetum lythargyri, or with mucilage, as in Nos. 25. and 26. a grain may be added to ſix or eight ounces of water. When mixed with either of the two firſt of theſe articles, ſome part of the mercury precipitates, and is therefore loſt, and in the other the mucilage tends evidently to render it leſs active.

No. 27. R. Sal. ammon. crud. gr. x.
Solve in aq. font. ℥ x.

No. 28. R. Aq. fontan. ℥ x.
Spirit ſal. aromat. gutt. lx. M.

No. 29. R. Aq. fontan. ℥ x.
Sprit. corn. cervi gutt. lx. M.

No. 30. R. Formul. inject. No. 23. ℥ viii.
Lixiv. cauſtic. gutt. xx. M.

I have frequently found both the volatile and cauſtic alkali prove uſeful where other injections had failed, but we cannot with any certainty point out the ſtrength for any individual. While one is able to bear ten drops to every ounce of water, others cannot bear above three or four: The ſtrength I have adviſed in the three preceding formulæ proves to be the beſt for general uſe, but patients are more eaſily affected with variety in the ſtrength of theſe injections than of any other I have ever tried. The cauſtic alkali may be uſed in water alone; but may be ventured upon in larger quantities, and with more ſafety, when combined with a mucilaginous infuſion.

No. 31. R. Ærug. pp^tt. gr. viii.
Ol. oliv. Opt. ℥ iv. M.

No. 32. R. Ærug. pp^tt. ʒ i.
Spirit. corn. cerv. ℥ iv.
Digere et cola.
R. Solut. ſupr. parat. gutt. xl.
Aq. diſtillat. ℥ x. M.

Verdigris mixed with oil may be uſed with perfect ſafety of the ſtrength mentioned in No. 31, but as injections prepared with oil prove dirty and diſagreeable in the application, I commonly prefer the form of the remedy No. 32.

A much larger proportion of verdigris is commonly adviſed, but when more is employed, it precipitates immediately on being added to the water. Even of this ſtrength the precipitation cannot be prevented entirely but by adding about a half more of the volatile alkali to the filtered ſolution of the verdigris. After filtrating through paper, if two ounces of volatile alkali be added to it, no precipitation will take place if diſtilled water is employed; but in this caſe, a greater quantity of the ſolution

may be added to the ſame quantity of water. Inſtead of forty drops, forty-eight or fifty may be added to ten ounces of water.

No. 33. R. Aq. fontan. ℥ x.
Tinctur. cantharid. gutt. xx. ad xxx. M.

The three following are preſcriptions for bougies.

No. 34. R. Emplaſt. diachyl. ſimpl. ℥ iv.
Cer. puriſs. ℥ iſs.
Ol. oliv. opt. ʒ iii.

No. 35. R. Emplaſt. commun,
Spermat. cæt. a a ℥ iv.
Ol. oliv. opt. ℥ ſs.
Minii. ℥ ſs. M.

No. 36. R. Emplaſt. commun. ℥ vi.
Ceræ flavæ puriſſ.
Spermat. cæt. a a ℥ ii.
Ol. oliv. opt. ℥ i.
Antimon. crud. pptt. ℥ ſs. M. S. A.

Any of theſe preſcriptions afford a good compoſition for bougies. They require to be ſlowly melted, and the different articles to be well mixed together. No. 34. is the ſimpleſt and perhaps the beſt, the red lead in No. 35. and antimony in No. 36. being added chiefly for the purpoſe of affording variety of colour. No. 37. is a compoſition for bougies recommended by Mr. John Hunter*, and No. 38. by Mr. Sharp†.

No. 37. Take oil of olives three pints, Bees wax one pound, Red lead a pound and a half. Let them be boiled together on a ſlow fire for ſix hours.

No. 38. R. Diachyl. cum pice burgund. ℥ ii.
Argent. viv. ℥ i.
Antimon. crud. pptt. ℥ ſs.

The quickſilver to be previouſly diſſolved in balſam of ſulphur, or in honey, and added to the plaſter when melted in a moderate heat.

Any of theſe compoſitions, when boiled to a proper conſiſtence, will anſwer for the formation of bougies, which is done in the following manner: While the liquid ſtill continues warm, let a piece of fine old linen be dipped in it, taking care with a ſpatula to cover the whole of it. If the melted liquor be of a proper heat, no more of the plaſter will adhere to the linen than is neceſſary; but as air bubbles are apt to riſe and produce inequalities on the ſurface of the cloth, the ſpatula made uſe of ſhould be ſomewhat warmer than the plaſter, and by means of it the whole ſhould be made as ſmooth as poſſible. The plaſter might indeed be ſpread entirely with the ſpatula; but this is not only attended with more trouble, but it does not cover the cloth with ſufficient equality.

* See Treatiſe on the Venereal Diſeaſe, p. 137.
† See Critical Enquiry by Samuel Sharp, F. R. S. &c.

The cloth being ſufficiently cold, may be immediately formed into bougies, and the whole ſhould, in the firſt place, be cut into the number that is meant to be made. The moſt exact method of doing this is by means of a ſharp pointed knife directed by a rule. The pieces ſhould be eleven inches in length for bougies of a full ſize; but they ſhould likewiſe be kept of all the variety of lengths for ſtrictures of different heights in the urethra.

A variety of directions have been given for the form of bougies. Some adviſe them to be made nearly of an equal thickneſs to within an inch of their ſmalleſt end, and to taper from that to the point, while a great proportion of them are made to taper to within an inch or two of the point, and the reſt of them are cylindrical. I once thought that this laſt form of bougie was the beſt; but after a long courſe of experience in this branch of buſineſs, I am now convinced, that bougies, which taper equally from one end to the other, are the beſt, and that this form anſwers equally well for every variety of ſize. They are introduced more eaſily, and leſs pain than any of the others; the linen ſhould therefore be cut in ſuch a manner as to give this form to the bougies. When rightly ſpread, and the linen ſufficiently fine, a well ſhaped bougie will be formed of a ſlip of about five eighths of an inch broad at its largeſt end, and ſomewhat more than three eighths at the ſmalleſt end. This forms a bougie of a middle ſize; for particular purpoſes they muſt be conſiderably larger, and for others not ſo large by a great deal.

Theſe ſlips of linen are now to be rolled up as neatly as poſſible with the fingers; and in order to give them a ſmooth poliſhed ſurface, they ſhould be ſmartly rolled between a piece of ſmooth hard timber, and a plate of fine poliſhed marble: This being continued till the whole are rendered perfectly ſmooth and firm, and their points being properly rounded in order to facilitate their introduction, they are in this ſtate to be kept for uſe.

Theſe directions will convey an idea of the method of preparing bougies, but no ſurgeon can ever become ſo expert in forming them as thoſe artiſts who are daily accuſtomed to prepare them in large quantities. I muſt here again obſerve, however, in addition to what I had occaſion to remark in a former part of this work, that bougies, properly prepared with reſina elaſtica, are preferable, in many circumſtances, to ſuch as are made with any kind of plaſter. They not only prove much more durable, but more force can be employed with them, and as they do not break or crack by remaining in the urethra, they remain in it with leſs pain and inconvenience than any other bougie that has yet been invented.

Cat-gut has frequently been uſed as a bougie; but after various trials being given to it, I do not find that it anſwers the purpoſe: It cannot be made ſufficiently ſmooth, and it ſometimes ſwells ſo much as to excite a good deal of irritation; and lead, which was one of the firſt articles uſed for bougies, is ſo firm that it always creates much pain, while at the ſame time it is ſo apt to break that different inſtances having occured of this happening in the urethra, it has now been long laid aſide.

The ſix following preſcriptions are meant for the removal of warts and other excreſcences, and they anſwer equally well whether they proceed from Gonorrhœa or Lues Venerea. It would appear, however, that there is a material difference between the warty excreſcences which occur as a conſequence of theſe diſeaſes, and ſuch as we uſually meet with from other cauſes; for while the former are for the moſt part eaſily removed by any of theſe applications, even by the pulvis ſabinæ alone, the latter are ſeldom acted upon by any of them, if it be not by the ſtrong ſolution of corroſive ſublimate in No. 40. and of mercury and ſpirit of nitre, No. 41. both of which are poſſeſſed of a ſtrong degree of cauſticity.

No. 39. R. Sal-ammon. crud. ʒ i.
Solve in acet. diſtellat. ʒ ii.
Aq. fontan. ʒ iv.

No. 40. R. Hydrargyr. muriat. vulgo merc. ſublim. corroſ.
Sal-ammon. crud. a a ʒ ſs.
Solve in aq. fontan. ʒ iv.

No. 41. R. Argent. viv. ʒ i.
Solve in ſpirit. nitr. fort. ʒ ii.

No. 42. R. Pulv. fol. ſabin.
Calomel. a a. ʒ i. M.

No. 43. R. Pulv. fol. ſabin.
Mercur. ſublim. corroſ. a a. ʒ iii.
Mercur. precip. rub. ʒ i. M.

No. 44. R. Alumen. uſt.
Mercur. precip. rub. a a. ʒ i. M.

The following form of decoction of ſarſaparilla and mezereon is of a ſtrength which moſt people can bear; when a greater proportion of mezereon is added, it excites ſickneſs, and a very diſagreeable ſenſation in the throat. I mention it here as I have had occaſion to ſpeak of it in the preceding work; and I ſhall alſo have cauſe to refer to it when treating of a Lues Venerea.

No. 45. R. Rad. ſarſæ ʒ ii.
Cortic. radic. mezer. ʒ iſs.
Coq. in aq. fontan. ℔ iii. ad ℔ ii.
Colaturæ, adde.
Syrup. altheæ ʒ i.

The following is the Decoctum Luſitanicum, or Liſbon diet-drink.

No. 46. R. Rad. ſarſaparil.
Santal. alb.
Rubr. a a. ʒ iii.
Rad. glycyriz.
Mezerei. a a. ʒ ſs.
Ligni rhodii.
Guagaci.

Saſſafras. a a. ʒ i.
Antimon. crud. ʒ ii. miſce, et infunde in aquæ fontanæ bullientis. ℔ x. per horas xxiv. dien, coque ad ℔ v. colaturæ capiat a ℔ iſs. ad. ℔ iv. quotidie.

Vel R. Rad. ſarſaparillæ.
Ligni ſaſſafras.
Ligni ſantal. rubri.
Guagaci a a. ʒ iii.
Cortic. rad. mezer. ʒ i.
Semin. corriand. ʒ vi.
Coq. in aq. fontan. ℔ xx. ad ℔ x.
Sumat ℔ ſs. ter quaterve indies.

Unguentum e calce zinci.

No. 47. R. Olei olivarum opt. ʒ iii.
Ceræ albæ.
Sperm. cetæ a a ʒ iii.
Leni calore liqueſc. dein adde. florum zinci ʒ ſs.

Unguentum e lapide calaminare.

No. 48. R. Olei oliv. opt. ʒ iii.
Ceræ albæ. ʒ iiſs.
Sperm. ceti. ʒ ſs.
Lapid. calamin. pp^tt. ʒ v. M. S. A.

VOL. II.

THE following Appendix contains formulæ of all the medicines enumerated in the ſecond volume, as well as of ſome others occaſionally employed by other practitioners in the cure of Lues Venerea.

No. 1. *Emplaſtrum hydrargyri, vulgo, Emplaſtrum cæruleum, vel mercuriale. Ph. Edin.*

R. Olei olivarum.
Reſinæ albæ utriuſque partem unam.
Hydrargyri partes tres.
Emplaſtri lythargyri partes ſex.

Cum oelo et reſina, liquefactis ſimul, et dein refrigeratis, teratur hydrargyrus, donec evaneſcant globuli; tum paulatim addatur emplaſtrum lythargyri liquefactum, et omnia accurate miſceantur.

Unguentum hydrargyri fortius, vulgo, Unguentum mercuriale. Pharm. Lond.

No. 2. Hydrargyr. purif. P. libras duas.
Adepis ſuillæ præparatæ P. uncias tres et viginti.
Sevi ovilli preparati P. unciam unam.

Tere primum hydrargyrum cum ſevo et tantillo adepis ſuillæ, donec globuli viſum fugerint; dein adde quod reliquum eſt adipis, ut fiat unguentum.

Unguentum hydrargyri mitius.

R. Unguentum hydrargyri fortioris partem unam.
Adepis ſuillæ preparatæ partes duas, miſce.

No. 3. *Pilulæ hydrargyri, vulgo, Pilulæ mercuriales. Pharm. Edin.*

R. Hydrargyri.
Mannæ, utriuſque unciam unam, pulveris glycyrrhizæ uncias duas.

Tere hydrargyrum cum manna in mortario vitreo, donec illius globuli viſum penitus effugerint, addito prout opus fuerit, mucilaginis gummi arabici aliquantulo; dein pulverem glycyrrhizæ adjice, et aqua fiat maſſa, ſtatim dividenda in pilulas quadringentas octoginta æquales.

No. 4. *Solutio mercurii gummoſa, vulgo. Plenk's ſolution.*

R. Mercurii vivi depuratiſſimi ʒ i.
Gummi Arabici ʒ ii.

Terantur invicem in mortareo lapideo, addito medio, cochleari aquæ fumariæ, donec mercurius penitus diſpareat in mucum. Exacte ſubactis admiſce ſenſim conterendo.

Syrupi kermeſini ʒ ſs.
Aquæ fumariæ ʒ viii.
Sum. mane et veſpere, cochlearia duo.

Solutio Mercurii Alia.

R. Hydrargyr. puriſs. ʒ ii.
Gummi Arabici ʒ ſs.

Terantur invicem in mortareo lapideo, addito medio, cochleari aquæ, donec hydrargyrus in mucum diſpareat. Huic ſubacto adde.

Aquæ fontanæ ʒ ix.

No. 5. *Mel Mercuriale.*

R. Mellis;
Hydrargyri, utriuſque unciam,

Terantur in mortareo marmoreo donec hydrargyri globuli non amplius appareant.

No. 6. *Hydrargyrus cum creta, vulgo, Mercurius alkalisatus. Ph. Lond.*

R. Hydrargyri purificati uncias tres.
Cretæ preparatæ uncias quinque.
Tere simul, donec globuli visum fugerint.

No. 7. *Hydrargyrus calcinatus, vulgo, Mercurius calcinatus. Ph. Lond.*

R. Hydrargyri purificati libram unam.
Hydrargyrum in cucurbita vitrea, cui fundus planior sit, in balneo arenæ, caloris 600°, expone, donec in pulverem rubrum concreverit.

No. 8. *Hydrargyrus muriatus corrosivus, vulgo, Mercurius sublimatus corrosivus. Ph. Ed.*

R. Hydrargyri.
Acidi nitroci diluti, utriusque uncias quatuor.
Muriæ exsiccatæ,
Ferri vitriolati exsiccati, utriusque uncias quinque.

Solvatur hydrargyrus in acido nitroso, et vaporet solutio in massam albam penitus siccam; dein adde muriam et ferrum vitriolatum. Bene contrita et commixta indantur phialæ, quam fere dimidiam impleant; et ex arena, primum igne leni, postea sensim aucto, sublimentur.

No. 9. *Hydrargyrus muriatus mitis, vulgo, Calomelas, sive mercurius dulcis.*

R. Hydrargyri muriati corrosivi, in mortario vitreo triti uncias quatuor,
Hydrargyri uncias tres cum semisse.

Terantur simul in mortario vitreo ad extinctionem hydrargyri; pulvisque phialæ oblongæ, cujus tertiam tantum impleat partem, inditus, ex arena calida sublimatur. Sublimatione peracta confractaque phiala, pulvis rubens circa fundum et albicans circa collum ejus pariter rejiciendus est, massa vero reliqua, ter quatuorve denuo sublimando, et in pulverem tenuissimum terenda.

No. 10. *Solutio mercurii spirituosa.*

R. Mercur. sublimat. corros. gr. x.
Solve in spirit. vin. gallic ʒ xvi.

No. 11. *Pilulæ e mercurio ſublimato corroſivo.*

R. Mercurii ſublimati corroſivi.
Salis ammoniaci, utriuſque grana decem.
Aquæ diſtillatæ drachmam.
Conſervæ roſarum ſcrupulos duos.
Pulveris radicis glycyrhizæ, q. ſ. ut f. maſſa in pilulas octaginta dividenda.

No. 12. *Aqua phagadenica.*

R. Mercurii ſublimati corroſivi ſcrupulum unum.
Solve in aquæ calcis libram unam,

No. 13. *Hydrargyrus nitratus ruber, vulgo, Mercurius precipitatis ruber. Ph. Edin.*

R. Hydrargyri.
Acidi nitri diluti, utriuſque libram unam.

Solvatur hydrargyrus, lentoque igne vaporet ſolutio in maſſam albam ſiccam; quæ in pulverem contrita, et cucurbitæ vitreæ inditæ, torreatur igne, ſenſim auctio, materia aſſidue bacillo vitreo agitata ut æqualiter incaleſcat, donec ejus pauxillum, cochleari vitreo exemptum et refrigeratum, ſquamulas ſplendentes rubras exhibeat. Tum vas ab igne removeatur.

No. 14. *Unguentum Hydrargyri Nitrati, vulgo, unguentum Citrinum.*

Hydrargyri unciam unam.
Acidi nitroſi, uncias duas.
Axungiæ porcinæ libras duas.

Digere hydrargyrum cum acido nitroſo ſuper arenam calidam, ut fiat ſolutio, quam calidiſſimam adhuc miſce cum axungia porcina liquefacta, et denuo frigeſcente; ſtrenue dein miſturam ſubige in mortario vitreo, ut fiat unguentum.

No. 15. *Hydrargyrus precipitatus cinereus, vulgo, Pulvis mercurii cinereus. Ph. Edin.*

R. Hydrargyri.
Acidi nitroſi diluti, paria pondera.

Miſce ut ſolvatur hydrargyrus, ſolutum aqua pura dilue, et adde aquæ ammoniæ quantum ſatis ſit ad hydrargyrum penitus ab acido liberandum; pulvis dein aqua pura lavetur et exſiccatur.

No. 16. *Hydrargyrus vitriolatus flavus vulgo, Turpethum minerale. Ph. Lond.*

R, Hydrargyri purificati libram unam.
Acidi vitriolici uncias quindecem.

Mista in vase vitreo, gradatim incalescant donec coëant, et materia igne acri penitus exficcetur. Hæc, plurima aqua distillata calida affusa, statim flavescet, et in pulverem fatiscet, pulverem tere cum hac aqua in mortario vitreo. Postquam pulvis subsederit aquam effunde, et aqua distillata lava materiem donec saporis expers fuerit.

No. 17. *Pilulæ e mercurio acetato, vulgo, Trochisci Keyseri.*

R. Mercurii acetati.
Mannæ purif.
Pulv. gum. arab. utriusque ʒ i.
Aquæ rosæ, q. s. ut f. massa in pilulas sexaginta dividenda.

No. 18. *Pilulæ e mercurio tartarisota.*

R. Mercurii tartarisat. ʒ i.
Pulv. rad. glycyrhiz.
Conserv. rosæ. utriusque ʒ ii.
Mncilag. gum. arab. q. s. ut f. massa in pilulas sexaginta dividenda.

No. 19. *Gargarisma e borace.*

R. Borac. purif. ʒ i.
Solv. in aquæ fontanæ bullientis libram unam, et adde
Mellis optim. uncias duas.

No. 20. *Pilulæ Plummeri.*

R. Calomelanos.
Sulphuris aurat. antimon. utriusque unciam.
Conserv. Rosar. q. s. ut fiat massa.

No. 21. *Decoctum ligni guagaci.*

R. Rasur. ligni guajac. ʒ iss.
Rad. glycyrhizæ ʒ ss.
Coq. in aq. fontanæ ℔ ii. ad ℔ iss.
Colaturæ adde.
Sacchari, q. s.

No. 22. *Decoctum sarsaparillæ.*

R. Radicis sarsaparillæ fissæ ʒ iii.
Aquæ bullientis libras tres.

Infundantur per horas quatuor, dein expreſſo liquore probe contundatur radix, cui iterum adjice liquorem. Macera per haras ſeptem, poſtea coque ad libras duas, et fortiter expremendo cola.

No. 23. *Decoctum rad. mezerei.*

R. Corticis radicis mezerei, drachmam.
Radicis glycirrhizæ, drachmas duas.
Aq. fontanæ libras tres.
Coque ad libras duas.
Colaturæ adde.
Syrup. altheæ unciam unam.

No. 24. *Pulvis ipecacuanhæ compoſitus, vulgo, Pulvis Doveri, Pharm. Lond.*

R. Ipecacuanhæ.
Opii purificati duri, ſingulorum in pulverem tritorem drachmam unam.
Kali vitriolati in pulverem triti unciam unam. Miſce.

No. 25. *Unguentum mercuriale album.*

R. Unguent. ſimplic. Ph. Edin. uncias duas.
Calomelanos drachmas duas. Miſce.

No. 26. *Unguentum mercuriale rubrum.*

R. Unguent. Barſillic. Pharm. Edin. unciam unam.
Mercur. precip. rub. pp^{tt}. drachmas duas. Miſce.

No. 27. *Unguentum ex Ærugine.*

R. Unguent. baſilic. Pharm. Edin. unciam unam.
Æruginis pulv. ſcrupulum unum. Miſce.

No. 28. *Unguentum ſaturninum, Pharm. Lond.*

R. Ceruſſæ acetatæ drachmas duas.
Ceræ albæ P. uncias duas.
Olei olivæ M. libram dimidiam.

Ceruſſam acetatam, in pulverem tritam, cum aliqua olei parte contere; deinde eam ceræ, cum oleo reliquo liquifactæ, adde. Miſturam agita donec refrixerit.

No. 29. *Linimentum ceræ Pharm. Lond.*

R. Ceræ albæ P. uncias quatuor.
Spermatis ceti P. uncias tres.
Olei olivæ M. libram unam.

Lento igne liquefacta aſſidue acriterque agita, donec refrixerint.

No. 30. *Linimentum lapidis calaminaris.*

R. Olei olivarum M. libram unam.
Ceræ albæ P. uncias duas.
Lapidis calaminaris præparati, P. unciam unam. M. S. A.

No. 31. *Emplaſtrum lythargyri, vulgo, Emplaſtrum commune. Pharm. Edin.*

R. Lythargyri partem unam.
Olei olivarum partes duas.

Adjecta aqua, coque, aſſidue agitans, donec oleum et Lithargyrus coeant in emplaſtrum.

No. 32. *Muriated Barytes.*

This preparation is obtained by diſſolving aerated barytes in the muriatic acid. The proceſs is not difficult, and I meant to have given a form of it; but as this article has never till of late been uſed as a medicine, as ſome varieties of the terra ponderoſa have lately been diſcovered, and as it requires ſome diſcernment to diſtinguiſh them, I think it better, in a point of ſuch importance, to refer to a more particular account of it than could be inſerted in this place. This is the more neceſſary, as the medicine, even in its pureſt ſtate, is of a nature that requires to be uſed with much caution; and particularly as many ſpecimens of barytes are found to contain conſiderable quantities of lead, copper, and arſenic.

The paper to which I allude is written by Doctor Adair Crawford of London, and is inſerted in the ſecond volume of Medical Communications. Doctor Crawford, beſides giving an accurate detail of the effects of this medicine in ſeveral caſes of ſcrophula and cancer, gives directions for detecting the admixture of other ſubſtances, and for regulating the doſes. The doſe ought at firſt to be very ſmall, not more than four drops for an adult, and two for children of eight or ten years. I have found, however, that when increaſed in a gradual manner, thirty drops may be given to an adult, and repeated two or three times a day; but as Doctor Crawford very properly obſerves, the quantity ſhould not be farther augmented, after it begins to excite nauſea or any diſagreeable ſymptom. I even think, that in ſuch circumſtances, it ſhould, for a few days, be omitted, and the doſe leſſened on being again entered upon. In the trials that I have made with it, no harm has ever been done by it, while in different caſes of obſtinate ſores, proceeding from ſcrophula, as well as other cauſes, it has evidently proved uſeful. Since I had occaſion to mention this remedy in a former part of this work, I have given it in twelve different caſes; but as moſt of theſe are ſtill under cure, I cannot, with propriety, give a detail of them.

I may remark, however, in general, that the more experience I have had of it, the more I am pleaſed with it. Where no effect has been produced by it on the diſeaſe for which it was preſcribed, it has ſeldom failed to excite appetite, and to improve the ſtrength and general health of the patient. I therefore conſider it as an important addition to our liſt of tonics. Hitherto the ſolution which I have employed has been procured from London; but as I expect ſoon to be ſupplied with a quantity of terra ponderoſa, I mean to have it prepared here.

INDEX.

A.

	Vol.	Page.
ABORTION a frequent conſequence of Syphilis	II.	194
——— obſervations on		ib.
Abſceſſes in perinæo	I.	73
——— in the corpus cavernoſum penis		ib.
——— in the ſubſtance of the urethra		ib.
Abſorption, promoted by friction	II.	17
Ærugo, form of uſing in injections		239
Æther, uſeful in ſpaſms of the urethra	I.	135
Alkali Volatile, forms of uſing in injection	II.	239
Allum, uſed in injections for Gonorrhœa	I.	61
——— form of uſing	II.	236
and		238
Alopecia, deſcription of		64
——— method of treatment of		184
Anomalous Symptoms, deſcription of		69
——— method of treatment of		187
Antidote, definition of the term		95
Antimony Crude, uſeful in venereal eruptions		177
Aqua Phagadenica, form of		246
Aſthma Venereal, caſes of cured by mercury		213
Atrophy, a ſymptom of Lues Venerea		71
——— deſcribed		ib.
——— venereal, method of treatment of		188

B.

	Vol.	Page.
Balfams Aftringent, uſed in injections	I.	62
——— their uſe in Gleet		111
——— form of uſing in injection	II.	237
and		238
Bark Peruvian, uſeful in Gonorrhœa	I.	72
——— in ſwelling of the teſtis		186
Barytes Muriated, its effects in ſores ſucceeding to buboes	II.	168
——— obſervations on the uſe of		249
Bladder, inflammation of	I.	82
Blindneſs, from Lues Venerea	II.	65
——— deſcription of		ib.
Blindneſs venereal, method of treatment of		185
Bliſters, uſe of in Gonorrhœa	I.	71
——— uſeful in Gleet		115
——— their utility in deranged ſenſations of the bladder and perineum		169
——— ſometimes uſeful in hernia humoralis		186
——— in certain kinds of ſwellings	II.	180
Blood-letting, when indicated in Gonorrhœa	I.	76
——— uſeful in Chordee		89
——— local, uſeful in the treatment of bubo	II.	161
Blotches, venereal		41
——— moſt frequent ſeat of		42
——— how diſtinguiſhed		44
——— cure of		177
Borax, its utility in removing mercurial ſalivation		128
Bougies	I.	110
——— often uſeful in gleet		114
——— obſervations on		146
——— chief objects in the formation of		148
——— directions for the uſe of		149
——— ſometimes ſlip into the bladder		152
——— time of remaining in the urethra		ib.
——— ſhould not be allowed to remain long in the bladder		155
——— much perſeverance neceſſary in their application		159
——— formulæ for preparing	II.	240
Bubo, definition of		14
——— may take place without chancre, or any previous mark of infection		15
——— produced by the abſorption of the ſyphilitic virus		17
——— ſeat of		20
——— frequently more than one		22
——— cauſe of being always external		ib.
——— deſcription of		23
——— ſuppurates more quickly than other glandular tumors		24
——— how diſtinguiſhed from other tumors in the groin		25
——— often connected with ſcrophula		ib.
——— ſometimes connected with eryſipelas		26
——— in women, ſituation of		28
——— at firſt always local		29
——— method of treatment of		158
——— ſuppuration of, never to be encouraged		159
——— diſcuſſion of, always to be attempted		ib.
——— remedies to be applied for		ib.

	Vol.	Page.
Bubo ſuppurated, treatment of	II.	163
——— object in opening		164
——— different methods of opening		ib.
—— Indolent, ſtate of deſcribed		168

C.

Calces of Mercury, activity of	II.	103
——— differences between the		105
Calaminaris Lapis, form of uſing in injection		236
Calomel uſed in injections in Gonorrhœa	I.	61
——— forms of uſing in injection	II.	235
——— obſervations on		110
——— frictions with, in the inſide of the mouth		115
Camphor proves uſeful in chordee	I.	88
——— form of uſing in injection	II.	236
and		238
Cantharides, uſeful in gleet	I.	109
——— form of uſing in injections	II.	240
Caruncles, or fleſhy excreſcences in the urethra	I.	139
Cataracts, from Lues Venerea	II.	66
——— effect of mercury upon		185
Catheter, obſervations on the uſe of	I.	174
Cauſtic, danger of introducing into the urethra		162
——— caution, in applying to chancres	II.	148
——— experiment concerning		ib.
——— method of uſing		150
——— its utility in ſores ſucceeding to buboes		167
——— in venereal ulcers		171
Chancre within the urethra, inſtance of	I.	26
——— the matter of does not produce Gonorrhœa		32
——— does not always precede buboes		195
——— deſcribed	II.	3
——— different periods of appearing		9
——— ſeat of		ib.
——— matter of		10
——— varieties of		11
——— in ſome inſtances, rapid progreſs of		12
——— remarkable inſtances of		13
——— in women		ib.
——— cure of		146
——— ſhould be healed ſpeedily		ib.
——— the cure of, not always to be effected by the internal uſe of mercury		147
——— never to be truſted to local remedies alone		ib.
——— moſt quickly cured by the uſe of cauſtic		148
——— inflamed ſtate of, relieved by leeches		153
——— dangerous hæmorrhage from		154
——— inflamed ſtate of, not hurt by mercury		155
——— clean ſtate of various applications for		156
——— treatment of, when conjoined with phymoſis		157
——— in women, method of treatment of		ib.
Chops in the hands and feet deſcribed		69
——— method of cure of		187
Chordee, definition of	I.	87
——— produced by inflammation		ib.

	Vol.	Page.
Cicuta, ſometimes uſeful in ſores ſucceeding to buboes	II.	166
Circumciſion, obſervations on the operation of	I.	205
Cold Bathing, uſeful in Gonorrhœa		72
——— in Gleet		112
——— in ſwelling of the teſtis		186
Cold and Dampneſs, dangerous effect of in Lues Venerea	II.	53
Conſequences of Gonorrhœa Virulenta	I.	99
Cord Spermatic, ſwellings of		187
——— remedies applied for		188
Corona Veneris, what	II.	43
Cowper's Glands, affections of	I.	69

D.

Deafneſs, from Lues Venerea	II.	63
——— method of treatment of		186
Decoctum Luſtanicum, or Liſbon diet-drink, formulæ of		242
——— Ligni guajaci, form of		247
——— Sarſaparillæ		ib.
——— Mezerei		248
Deranged Senſations in the bladder and urethra	I.	164
——— not eaſily accounted for		167
——— remedies to be uſed in		168
Diarrhœa excited by mercury, remedies for	II.	131
Diſeaſes, different, may exiſt at the ſame time on the ſame part		48
Dropſy, ſyphilitic caſe of cured by mercury		228
Duncan, Dr. his opinion of the action of mercury		99

E.

Electricity, its utility in the indolent ſtate of Bubo	II.	169
Elephantiaſis, a ſymptom in Syphilis		69
Emetics, their utility in Hernia Humoralis	I.	185
Emplaſtrum Mercuriale, form of	II.	243
——— Lythargyri, form of		249
Epilepſy Syphilitic, caſe of, cured by mercury		230
Eruption induced by mercury, deſcription of		133
——— ——— remedies for		ib.
Eſcharotics, their utility in chancres		151
Excoriations from Gonorrhœa do not require mercury	I.	27
——— in the parts of generation of women		201
Excreſcences Venereal, about the anus	II.	59
——— deſcription of		60
——— in women, ſometimes produce buboes		ib.
——— cure of		181

INDEX.

F.

	Vol.	Page.
Fever, as a ſymptom of Lues Venerea	II.	72
—— Venereal, obſervations on		189
Fiſtula in Perinæo moſt frequent cauſe of	I.	161
Fluor Albus, its reſemblance to Gonorrhœa		92
———— how to be diſtinguiſhed from Gonorrhœa		93
———— cured by aſtringent injections		ib.
Frenum, ſometimes neceſſary to cut	II.	152
Fumigations with Mercury, in what manner applied		107
———— ſometimes uſeful in chancres		152
———— their utility in ſores ſucceeding to Buboes		168

G.

Gangrene induced by Chancres, rapid progreſs of	II.	153
———— opium the beſt remedy for		154
———— mercury does harm in		155
Gargariſma e borace, form of		247
Gilchriſt, Doctor, his Eſſay on Sibbens		201
Glands in the Groin, ſwellings of	I.	193
———— remedies employed in		194
Glans and Prepuce, excoriations of		196
Gleet, import of the term		100
—— remarkable caſe of		102
—— ariſes from different cauſes		103
—— often the effect of local relaxation		104
—— ſeldom of general debility		106
—— remedies uſeful in		107
—— inflammation uſeful in		110
—— diet recommended in		111
—— relieved by a ſeton in perinæo		115
—— a frequent conſequence of ſtrictures in the urethra		ib.
—— ſometimes relieved by opiates		118
Gonorrhœa and Lues Venerea appeared at different periods		18
— a much more frequent diſeaſe than pox		26
— tranſlation of the matter of		28
— the matter of, does not produce chancres		32
— and ſyphilis ſometimes remain long diſtinct		33
— time of appearing		37
— ſymptoms of		38
— ſympathetic pains in		ib.
— in women		41
— matter of		42
— manner of infection in		43
— remarkable fact in		44
— matter of, not produced by ulcers		ib.

INDEX.

	Vol.	Page.
Gonorrhœa produced by inflammation	I.	46
— reſemblance of to catarrh		47
— prognoſis in		ib.
— general obſervations on		50
— firſt ſtage of		55
— regimen in		66
— low diet improper in		ib.
— ſecond ſtage of		67
— third ſtage of		74
— fourth ſtage of		84
— in women		91
— always a local diſeaſe		96
Gonorrhœa ſpuria, what		197
—— obſervations on		ib.
—— means of diſtinguiſhing from Lues Venerea		198
—— method of curing		199
—— excited by ſavine applied to the urethra		214
Gonorrhœa ſimplex		214
—————— obſervations on		ib.
—————— remarkable caſe of		215
—————— may be produced by the matter of fluor albus		217
—————— may excite ſwelling of the teſtis		ib.
—————— ſwellings of the inguinal glands		218
—————— neceſſity of diſcriminating		219
—————— method of cure		220
Guaiacum, obſervations on	II.	138
———— proofs of its power as an anti-ſyphilitic		ib.
Gutta Serena, from Lues Venerea		66

H

Hæmorrhages from the urethra	I.	90
—————— produced by chancres, remedies for	II.	150
Headach, ſyphilitic caſe of, cured by mercury		232
Hernia Humoralis, what	I.	175
———— femoralis, ſometimes miſtaken for bubo	II.	27
Herpes, ſimilar to Venereal eruptions		43
Hunter Mr. John, ſome of his opinions examined, Vol. II. pages 17. 48. 86. & 131.		90
Hydrocele, ſometimes induced by hernia humoralis	I.	180
Hyoſcyamus, proves uſeful in chordee		89

I

Impotency, what	I.	121
———— cauſes of		122
———— frequently induced by local weakneſs		123

	Vol.	Page
Impotency ſeldom the effect of general debility	I.	123
——— two ſtages of		124
——— firſt ſtage of		127
——— ſecond ſtage of		ib.
——— relieved by electricity		129
——— by hyoſcyamus		ib.
——— may occur from ſwelling of the epidydymis		178
Inflammation, right degree of, neceſſary for the production of bubo	II.	16
Injections, their early application recommended	I.	58
——— not to be uſed while the teſtes are ſwelled		59
——— ſtrength of		63
——— manner of uſing		ib.
Injections frequency of uſing		65
——— ſometimes do harm		71
——— general obſervations on the uſe of		97
——— ſtimulating, uſeful in gleet		107
——— aſtringent ſometimes uſeful in gleet		114
——— formulæ of	II.	235

K.

Kidneys ſometimes affected in Gonorrhœa	I.	46
Kino, an uſeful ingredient in injections		61
—— uſeful in hæmorrhagies		90
—— forms of uſing in injection	II.	236
—— its utility in Diarrhœa		132

L.

Lapis Calaminaris uſed in injections	I.	61
Lavender, ſpirit of, an application for chancres	II.	156
Lead, uſed in injections	I.	62
Leeches, their utility in hernia humoralis		179
—— their bites, obſervations on		200
Lime Water, when uſeful in gleet		117
Linimentum Cereæ, form of	II.	248
Lips, method of treating chancres on		158
Lixivium Cauſticum, form of uſing in injections		239
Lues Venerea, ſometimes takes place without chancres	I.	24
——— appeared in Europe before Gonorrhœa		33
——— appeared at Otaheite before Gonorrhœa		ib.
——— when firſt accurately deſcribed	II.	3
——— in what manner communicated		4
——— often given by an infected nurſe to a child, and vice verſa		ib.
——— may be communicated by the milk in nurſing		5

	Vol.	Page.
Lues Venerea matter of, may be abſorbed from any part of the ſurface of the body	II.	6
——— is not readily abſorbed from the ſtomach		7
——— ſymptoms of		8
——— the cauſe of its breaking out ſooner in ſome than in others		19
——— cannot be cured by evacuants		94
——— in infants		190
——— proofs of		191
——— caſes of		192
——— how to be treated		196
——— remarkable caſe of		198
——— ſome peculiarities of form of		199
——— its power in inducing other diſeaſes		200
Lymphatic veſſels of the penis, ſwellings of	I.	189
——— remedies uſeful in		192
——— two caſes of		193
Lythargyri acetum, form of		237

M.

Mania Syphilitic, caſe of cured by mercury	II.	233
Mel Murcuriale, form of		244
Mercury not neceſſary in Gonorrhœa	I.	97
—— uſeful in a thickened ſtate of the bladder		99
—— never proves uſeful in gleet		119
—— apt to do harm in hernia humoralis		184
—— crude, form of uſing in injection	II.	235
Mercurius ſublimatus Corroſivus, form of uſing in injection		238
Mercury, partial uſe of, a remarkable effect of		49
—— general obſervations on		86
—— general effects of on the ſyſtem		87
—— ſtimulating effects of		ib.
—— diſtreſsful ſymptoms induced by		88
—— operation of in the cure of ſyphilis		89
—— irritation excited by, not neceſſary in the cure		90
—— does not cure ſyphilis by the evacuation which it excites		92
—— antidotal powers of, proofs of		95
—— acts as an antidote in the cure of ſyphilis		97
—— preparations of		100
—— in what manner rendered active		101
—— different methods of exhibiting		105
—— fumes of		ib.
——— in ſome caſes an uſeful remedy		106
Mercurial preparations from triture, obſervations on		108
Mercurius alkaliſatus, obſervations on		109
—— calcinatus, obſervations on		ib.
——— form of		245
—— ſublimatus corroſivus obſervations on		110
——— form of		245
—— cinereus, obſervations on		111
——— form of		246
—— acetatus, obſervations on		112
Mercurial frictions, obſervations on		113

INDEX.

	Vol.	Page.
Mercury abſorbed, quantity of difficult to aſcertain	II.	113
Mercurial courſe duration of		118
Mercury alterative, courſe of deſcribed		119
——— obſervations on		120
——— not to be depended on for the cure of ſyphilis		ib.
—— quantity of, neceſſary to be employed		123
—— courſe of regimen to be obſerved in		124
—— patients taking, ought not to go abroad		125
—— courſe of, a caution previous to		130
—— how far to be conſidered as a certain cure for ſyphilis		134
—— courſe of, its failure in the cure of ſyphilis		137
—— how to be applied for the diſcuſſion of buboes		160
—— ſhould be given in every ſtage of bubo		163
—— Van Swieten's ſolution of		245
Mercurius dulcis, form of		ib.
——— præcipitatus ruber, form of		246
Mezereon, obſervations on		141
——— method of exhibiting		142
——— uſeful in hernia humoralis	I.	185
Morbid ſtate of the ſyſtem induced by mercury	II.	135
Mucus, attraction between and mercury		41

N

Nodes, definition of	II.	52
—— moſt frequent ſituation of		53
—— deſcription of		ib.
—— cauſe of their being painful		54
—— cure of		178
—— when they ought to be laid open		179

O

Obſtructions in the urethra	I.	129
——— ſpaſmodic of the urethra		132
Ointment mercurial, ſtrength of	II.	116
——— obſervations on the uſe of		ib.
——— abſorption of, promoted by friction		117
Onaniſm, the baneful effects of	I.	123
Opiate Clyſters uſeful in Gonorrhœa		77
Opiate Clyſters uſeful in gleet		119
Opiates uſeful in chordee		86
— their utility in mortification		132
Opium uſed in injections in Gonorrhœa		61
— proves hurtful in impotency		128
— its utility in ſpaſms of the urethra		136

	Vol.	Page.
Opium an uſeful remedy in ſwelling of the teſtis	I.	181
— forms of uſing in injection	II.	96
— its utility in removing ſalivation		128
— obſervations on		143
— when firſt employed in the cure of ſyphilis		ib.
— proves chiefly uſeful by allaying irritation		ib.
— large doſes of given in Lues Venerea		144
— external application of		145
— its utility in irritability of the bladder and urethra	I.	168
— in ſores ſucceeding to buboes	II.	167
— often particularly uſeful in venereal ulcers		176

P.

Pains, venereal, how diſtinguiſhed from rheumatiſm	II.	56
Paraphymoſis, what	I.	197
—— obſervations on		207
—— operation for		208
Phthiſis Venereal, caſe of, cured by mercury	II.	210
Phymoſis, what	I.	197
— obſervations on		202
— remedies employed in		ib.
— operation for deſcribed		206
Pilulæ e Mercurio Sublimato Corroſivo	II.	246
— Plummeri		247
—— conſtitution in which they prove uſeful		129
—— their utility in venereal blotches		177
Plenk's ſolution, form of		244
Powders Eſcharotic, formulæ of	II.	242
Pox, no ſtage of ever induces Gonorrhœa	I.	31
Pregnancy, not always an objection to the uſe of mercury	II.	198
Prophylactics, obſervations on		205
Proſtate Gland, affections of	I.	75
Pulvis Doveri, form of	II.	248

R.

Remedies uſed in Lues Venerea, general obſervations on	II.	84
Reſina Elaſtica, the beſt material for bougies	I.	148
Rheumatiſm Syphilitic, caſe of, cured by mercury	II.	218
Ring Worm, what		44
Routine of practice to be guarded againſt		100

I N D E X.

S.

	Vol.	Page.
Saccharum Saturni, form of uſing in injections	II.	237
Sall Ammoniac, form of uſing in injections		239
Salivation not neceſſary for the cure of ſyphilis		126
— method of preventing		127
— method of removing		ib.
— moſt effectually relieved by local applications		ib.
— not always increaſed by more mercury		128
Sarſaparilla, obſervations on		140
——— method of exhibiting		141
Savine, its influence in removing warts	I.	212
Scrophula, obſervations on	II.	137
Scrotum, thickening of		70
Scurvy, obſervations on		135
——— and a courſe of mercury induce ſimilar effects		137
Sea Bathing uſeful in certain ſtages of bubo		169
——— its utility in venereal ſwellings of the teſtis		184
Semicupium proves uſeful in deranged ſenſations of the bladder	I.	169
Sibbens, what	II.	199
——— deſcription of		200
——— method of cure of		204
——— method of preventing		205
Sinuſes in perinæo, how to be treated	I.	73
——— produced by buboes, diſtreſsful effects of	II.	165
Solutions Eſcharotic, formulæ of		242
Sore Throat, venereal		30
——— deſcription of		ib.
——— often accompanied with eryſyphlas		31
——— ſometimes productive of deafneſs		32
——— ſometimes penetrates to the bones		ib.
——— ſometimes miſtaken for other affections		34
Spaſms of the urethra relieved by blood-letting	I.	136
——— by bliſters		137
——— by electricity		ib.
——— by bougies		138
Strictures in the urethra, obſervations on		141
—— ſeldom the conſequence of ulceration		144
—— — nor of the rupture of blood-veſſels		ib.
—— — nor of the uſe of injections		ib.
—— moſt frequently induced by relaxation		146
—— not to be cured by mercury		ib.
—— cured with moſt certainty by bougies		ib.
—— ſometimes ſeated in one ſide of the urethra		ib.
Sweating induced by mercury, method of preventing	II.	132
Symptoms, from the ſudden ſtoppage of Gonorrhœa not venereal	I.	23
Syphilis, remarkable cure of	II.	130

T.

	Vol.	Page.
Tendons and ligaments not often affected in Lues Venerea	II.	58
Teſticle, ſwelling of, from Lues Venerea		61
—— difference between it and hernia humoralis		ib.
—— how diſtinguiſhed from ſarcocele		62
Teſtes, both, ſometimes ſwell in Gonorrhœa	I.	175
— ſwelled ſymptoms produced by		ib.
— ſometimes ſwell from ſympathy		176
— ſwelling of, moſt frequently the effect of inflammation		ib.
—— ſeldom end in ſuppuration		178
— remedies employed for removing		179
— decay of		186
—— induced by onaniſm		187
—— ſtopped by a bliſter applied over the ſcrotum		ib.
Throat, ulcers in, cured by cauſtic	II.	171
Trochiſci Keyſeri, form of		247
Tumours in the ſubſtance of the urethra	I.	130
Turpethum Minerale, obſervations on	II.	111

U. and V.

Vas Deferens, ſwelling of	I.	22
Venereal ſwelled teſticle, cure of	II.	181
Verdigris, uſeful in Gleet	I.	109
— an uſeful application in chancres	II.	156
Vinegar, ſteams of, uſeful in ſwelling of the teſtis	I.	182
Virus Venereal, obſervations on	II.	74
— firſt acts upon the fluids		76
— its action in inducing other diſeaſes		210
— may remain long latent		234
— not to be removed by an alterative courſe of mercury		ib.
Vitriol uſed in injections	I.	62
Vitriolum Album, form of uſing in injections	II.	237
Ulcers Venereal, old, why they do not readily produce bubo		18
—— diſtinguiſhable into two kinds		ib.
—— deſcription of in the noſe and mouth		35
— in the mouth, how diſtinguiſhed from other affections		38
— venereal, ſome parts of the body more liable to than others		45
—— riſe and progreſs of		46
—— peculiar appearance of the matter of		ib.
—— ordinary ſeat of		47
— ſucceeding to buboes deſcribed		50
—————— a frequent cauſe of their obſtinacy		52
— venereal, cure of		170
— frequent cauſe of difficulty in curing		173
Unguentum e Calce Zinci, form of		243
—— lapide calaminari		ib.

I N D E X.

	Vol.	Page.
Unguentum mercuriale, form of	II.	244
—— citrinum		246
—— mercuriale album		248
—— rubrum		ib.
—— ex Ærugine		ib.
—— ſaturninum		ib.
Urine, remarkable effect of in gangrene		154
Uva Urſi, its utility in Gonorrhœa	I.	86
—— in affections of the bladder		98

W.

Warts on the genitals	I.	210
—— obſervations on		209
—— produced by irritation		210
—— ſometimes the conſequence of ſyphilis		211
—— —— more frequently of Gonorrhœa		ib.
—— removed by eſcharotics		212
—— —— by ſtimulants		ib.
Weeping eye, how produced by ulcers in the noſe	II.	36
Women not ſo ſuſceptible of Gonorrhœa as men	I.	91
—— not liable to ſtrictures in the urethra		120

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Med. Hist.
WZ
270
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